

**Staying in School: Exploring the Experiences of Post-Secondary Students with Diverse
Needs**

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ABSTRACT

The purpose of this study was to describe and facilitate further understanding of the school experiences (e.g., experiences related to academics, campus culture, and extracurricular involvement) of university students with learning, attention, emotional, and/or behavioural difficulties, with the hope of coming to a greater understanding of how academic success (i.e., continued education) is achieved among these individuals. This study employed a basic qualitative interpretive approach to understand the experiences of the students interviewed for this study (Merriam, 2002). Semi-structured interviews were utilized to gain insight into the experiences of these individuals. Analysis of the data generated from these interviews was conducted within the theoretical framework of resilience. Three themes were discovered as embedded within the data: (1) unpacking the “Box”: exploring perceived attitudes about diversity in the learning needs of students; (2) breaking the “Box”: redefining success by adapting behaviour in the context of post-secondary education; and (3) reshaping the “Box”: overcoming personal barriers and achieving success. Despite the barriers to academic success the participants in the present study experienced, they all described occasions during which they were able to demonstrate positive adaptation and multiple characteristics related to resilience in order to experience academic success in the post-secondary educational environment. This study concludes with a discussion of the practical implications of the findings, the limitations and strengths of the study, and areas recommended for future research.

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DEDICATION

I dedicate this thesis to my cats; may I always have the opportunity to blame my typos on your paws.

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CHAPTER 1: INTRODUCTION

Students in post-secondary classrooms experience a variety of learning, attention, emotional, and/or behaviour difficulties or disorders (Human Resources and Skill Development Canada, 2013). Learning Disabilities (LD) is a term generally referring to a number of disorders which may affect the acquisition, organization, retention, understanding, or use of verbal and nonverbal information, and affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning (Learning Disabilities Association of Canada, 2012). Dyslexia is one example of an LD and is characterized by difficulties in reading, spelling, writing, memory, coordination, organization, and information processing, as well as phonological and visual difficulties (Peer & Reid, 2003). One of the main diagnoses given for attention difficulties, as outlined in the *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, is Attention Deficit Hyperactivity Disorder (ADHD; American Psychiatric Association, 2013). Generally, individuals with this diagnosis may demonstrate a variety of difficulties in the following areas: attention, activity, alertness, stamina, emotional regulation, opposition or defiance, executive functioning, planning, sense of time, gross and fine motor movement, speech and language, perception, sleep, and memory (Gillberg, 2014; Wender, 2001). In relation to mental health, one of the main diagnoses given for persistent anxiety, as outlined in the *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*, is Generalized Anxiety Disorder (GAD; APA, 2013). This disorder is characterized by a persistent pattern of behaviours in which an individual engages in excessive worry that is unrealistic and difficult to control (Marker & Aylward, 2011; Rachman, 2013).

The prevalence of individuals diagnosed with mental health-related disorders in Canada is estimated to be 3.9% of the general population aged 15-64 years (Statistics Canada, 2012). Within the same age range, Statistics Canada (2012) estimated that the prevalence of LDs was 2.3%. Further, learning, attention, emotional, and/or behaviour disorders may be accompanied by other comorbid disorders. In fact, researchers have documented that coordination (dyspraxia), attention control (ADHD), and emotional or behavioural problems are among the most common difficulties associated with dyslexia (Snowling, 2005). Moreover, research has indicated that most children, adolescents, and adults who meet diagnostic criteria for ADHD also meet criteria for at least one additional psychiatric disorder (e.g., depression and anxiety disorders, Bipolar Disorder, Oppositional Defiant Disorder [ODD], Conduct Disorder [CD], tic disorders, and

Obsessive-Compulsive Disorder [OCD]) and that rates of these comorbid disorders are much greater among individuals with ADHD than those without ADHD (Abramovitch, Dar, Mittelman, & Wilhelm, 2015; Brown, 2013; Gillberg et al., 2004; Kessler et al., 2006; Pehlivanidis, Papanikolaou, Spyropoulou, & Papadimitriou, 2014). Further, 59% of individuals diagnosed with Generalized Anxiety Disorder (GAD) are also diagnosed with Depression (Marker & Aylward, 2011). In addition, approximately 91% of Canadians with a mental health-related disorder (e.g., anxiety disorder, depression, bipolar disorder, substance abuse, anorexia, etc.) have another disability (Statistics Canada, 2012). The presence of these difficulties can make achieving academic success (i.e., continuing their education) at the post-secondary level very challenging. Wolf (2001) stated that “nearly half of all disabled students drop out [of post-secondary education] compared with one-third of students without disabilities” (p. 387). She added that the dropout rate increases to approximately two-thirds for students with learning disabilities or *other*, including ADHD and psychiatric disabilities (Wolf, 2001).

While many studies of high school samples have investigated factors related to school drop-out, studies involving samples of post-secondary students appear to have focused on factors related to student retention as well as available support within and adjustment to post-secondary education (e.g., Dwyer, 2000; Getzel, 2008; Gilbert, 2005; Hadley, 2007; Kaminski, Turnock, Rosen, & Laster, 2006; Mortimore & Crozier; O’Keefe, 2013; Pino & Mortari, 2014; Taylor, Duffy, & England, 2009; Trammel, 2003; Wilmhurst, Peele, & Wilmhurst, 2011). However, knowledge of *how* these factors affect students with learning, attention, and/or behaviour difficulties or disorders is limited (e.g., O’Keefe, 2013; Shepler & Woosley, 2012; Pino & Mortari, 2014). How positive adaptation occurs for these students, despite their diagnosis, is largely understudied. Therefore, the concept of resilience may be an important lens through which to view why some students with learning, attention, emotional, and/or behaviour disorders decide to stay in school.

Further, a limited number of studies have focused on the perspectives and experiences of the individuals who have been diagnosed with learning, attention, emotional, and/or behavioural disorders (e.g., Demery, Thirlaway, & Mercer, 2012; Dwyer, 2000; Mullins & Preyde, 2013). In order to develop appropriate programs and accommodations that will help these individuals graduate from school, and consequently mitigate some of the negative consequences associated

with dropping out of school, it is necessary that the experiences of those students are directly examined from their perspectives.

1.1 Statement of Purpose

More information is needed to better understand how individuals with learning, attention, mood, and/or behaviour disorders believe their school experiences have affected their decision to stay in school. In order to expand educators' understanding and ability to address students' needs, effective interventions and accommodations need to be based on the educational and individual needs of those diagnosed with these disorders (Sharby & Roush, 2009). In comparison to accommodations that may be provided for students in elementary and high school, there are a limited number of accommodations provided at the post-secondary level and students must request accommodations (e.g., speech-to-text software, text-to-speech software, extended time for exam-writing, alternate exam formats, tutors, note-takers, etc.; Hadley, 2011; Hamblet, 2014; Newman & Madaus, 2015). Identifying post-secondary students' needs within the context of the university setting may require a deeper understanding of how these students experience the school environment (Demery et al., 2012; Mullins & Preyde, 2013). A deeper understanding of students' experiences may add to existing knowledge of how instructors, administrators, parents, and all of those who work with students with identified exceptionalities at the post-secondary level can continue to address, improve, and support students' potential for success, defined as maintaining enrollment in their university programs (Demery et al., 2012; Mullins & Preyde, 2013). By presenting students' experiences in their own words, participants are providing valuable information. The current study focused on the school experiences of four undergraduate students attending a Western Canadian university who had been diagnosed with a learning, attention, emotional, and/or behaviour disorders. The purpose of this study was to describe and facilitate further understanding of the school experiences of university students with diverse learning needs, with the hope of coming to a greater understanding of how academic success (i.e., continued education) is achieved among these individuals. The research questions that guided this inquiry included:

1. What are the school experiences of undergraduate students with learning, attention, emotional, and/or behaviour disorders? and
2. What school-related factors contribute to these students' decision to stay in school?

1.2 Definitions

For the purpose of adding greater clarity to terms used in this study, and the diagnoses of participants, the following terms were defined:

1.2.1 Learning Disabilities (LD)

Learning Disabilities (LD) generally refer to a number of disorders which may affect the acquisition, organization, retention, understanding, or use of verbal and nonverbal information, and affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning (Learning Disabilities Association of Canada, 2012). These difficulties may be manifested in listening, speaking, reading, writing, reasoning, or mathematical abilities (Torgesen, 2004). LDs “are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span” (NJCLD memorandum, 1988, p.1).

1.2.2 Dyslexia

In 2002, the International Dyslexia Association (IDA) adopted the following definition of this specific LD:

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge. (IDA, 2008, p. 1)

1.2.3 Attention Deficit Hyperactivity Disorder (ADHD)

ADHD generally refers to a disorder present from childhood, and potentially persisting into adulthood, with individuals demonstrating marked difficulties within the areas of attention, (hyper) activity, and/or impulsiveness (Gillberg, 2014). Individuals with ADHD are characterized by the intensity, persistence, and patterning of their symptoms (Wender, 2001). There are three subtypes of ADHD: (1) hyperactive-impulsive subtype, in which ADHD is dominated by hyperactivity and a lack of impulse control; (2) inattentive subtype (sometimes referred to as Attention Deficit Disorder [ADD]), in which ADHD is dominated by attention deficit; and (3) combined type, ADHD in combination with both attention deficit and hyperactivity/lack of

impulse control (American Psychiatric Association, 2013; Gillberg, 2014). Although all subtypes of ADHD cause functional impairment, hyperactive-impulsive and combined subtypes are usually associated with moderate to severe impairment, while inattentive subtype appears to have more variable clinical impairment (American Psychiatric Association, 2013; Gillberg, 2014)

1.2.4 Generalized Anxiety Disorder (GAD)

GAD generally refers a persistent pattern of behaviours in which an individual engages in excessive worry that is unrealistic and difficult to control (Marker & Aylward, 2011; Rachman, 2013). Worry may be defined as an attempt to engage in mental problem-solving on an ambiguous issue with a potentially threatening outcome (Borkovec, Robinson, Pruzinsky, & Depree, 1983; Rachman, 2013). Common areas of worry may include: family/home relationships; finances; work/school; illness/health; the future; success/failure; psychological/emotional; world issues; travel; or minor matters (Marker & Aylward, 2011; Rachman, 2013). The key difference between GAD and regular worry is that the worry is excessive (i.e., much more frequent) and difficult for the individual to control (Nydegger, 2012). Further, the worries are not focused on one situation (e.g., feeling embarrassed), but extend across a number of events (Nydegger, 2012).

1.2.5 Resilience

Resilience refers to "positive adaptation in the context of significant challenges, variously referring to the capacity for, processes of, or outcomes of successful life-course development during or following exposure to potentially life-altering experiences" (Masten et al., 2009, p. 119). Moreover, resilience only exists in the face of adversity; individuals are not considered to demonstrate a resilient pattern if they have never experienced serious threats to development, as resilience only exists in the face of adversity (Masten, 2001). Masten and Powell (2003) contended that "resilience is an inference about a person's life that requires two fundamental judgments: (1) that a person is 'doing okay' and (2) that there is now or has been significant risk or adversity to overcome" (p. 4).

1.3 Significance of the Study

The experiences shared by the participants in this study highlight some key areas for consideration in supporting post-secondary students with exceptionalities. First, this study provides insight into, and understanding of: (1) the life of post-secondary students with learning, attention, emotional and/or behaviour disorders, and (2) the positive experiences students have

had in the school environment. Further, this research has the potential to provide educators and school administrators with a deeper understanding of how to ensure that post-secondary students identified with similar diagnoses are provided with appropriate educational experiences that facilitate the completion of university. This study may also provide some support for the positive psychological approach that has become dominant within the fields of educational psychology and special education (e.g., Eryilmaz, 2015; Farmer, Allsopp, & Ferron, 2015; Field, Duffy, & Huggins, 2015; Murphy, 2013). Most importantly, limited research focusing on understanding the school experiences of undergraduate students with learning, attention, emotional, and/or behaviour disorders has concentrated on the perspectives of the individuals themselves (e.g., Demery et al., 2012; Mullins & Preyde, 2013). Therefore, this study sought to contribute to this small body of research and improve the comprehensive understanding that educators, disability service providers, educational administrators, academic advisors, and school counsellors have of these students' decision to enroll and stay in school.

1.4 Chapter Organization

A review of the literature related to learning, attention, emotional, and/or behaviour difficulties or disorders relevant to this study follows in Chapter 2. Chapter 3 describes the research methods and procedures that were employed in the current study. Chapter 4 presents the results of the study and the three major themes that were found. Finally, Chapter 5 discusses the integration of the findings to existing literature, practical implications of the findings, strengths and limitations of the study, and implications for future research.

CHAPTER 2: REVIEW OF THE LITERATURE

This review of the literature related to the diverse learning needs of students is divided into four major sections. Section one discusses the diagnostic criteria, prevalence, etiology, and assessment of learning, attention, emotional, and/or behaviour disorders relevant to the participants in this study. Section two discusses the outlined disorders and difficulties in relation to school dropout and draws on literature regarding student outcomes and school factors related to school dropout. Section three reviews literature investigating why students decide to stay in school, while section four discusses research related to a pattern of resilience demonstrated by students with specific and diverse learning needs. These bodies of research inform the rationale for the present study.

2.1 Students with Exceptionalities

Students in today's post-secondary classrooms experience a variety of learning, attention, emotional and/or behaviour difficulties or disorders. An understanding of these disorders is crucial for developing: an awareness of why students may choose to continue their education or drop out of school, and teaching and administrative practices that serve to assist these students in graduating from post-secondary institutions.

2.1.1 Learning Disabilities

Learning Disabilities (LD) generally refer to a number of disorders which may affect the acquisition, organization, retention, understanding, or use of verbal and nonverbal information, and affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning (Learning Disabilities Association of Canada, 2012). These difficulties may be manifested in listening, speaking, reading, writing, reasoning, and/or mathematical abilities (Torgesen, 2004). One specific example of an LD relevant to this study is dyslexia.

2.1.1.1 Dyslexia. In 2002, the International Dyslexia Association (IDA) adopted the following definition of dyslexia, stating:

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include

problems in reading comprehension and reduced reading experience that can impede the growth of vocabulary and background knowledge. (IDA, 2008, p. 1)

Dyslexia may be characterized by discrepancies, as well as difficulties, in a number of areas (i.e., memory, coordination, information processing, and academic areas that involve writing, reading, and spelling (Levine, 2002; Peer & Reid, 2003; Shaywitz, 2003; Torgesen, 2006). One of the defining factors associated with dyslexia is this discrepancy which may be noted in different academic areas (Peer & Reid, 2003). That is, students with dyslexia often have difficulty in subject areas that are heavily literacy-based, while they may demonstrate considerable skill in other subject areas such as art or music. This finding suggests that dyslexia is a very specific difficulty that applies to learning in specific contexts (Hahn, Foxe, & Molholm, 2014; Kwok & Ellis, 2014; Peer & Reid, 2003). In relation to the difficulties associated with dyslexia, students may experience problems in: reading (fluency, accuracy, and comprehension), spelling, writing (expressive writing and handwriting style), memory (short- and long-term memory storage), coordination (fine motor and gross motor activities), organization, and information processing, as well as phonological and visual difficulties (Andreou & Baseki, 2012; Aravena, Snellings, Tijms, & van der Molen, 2013, Hahn et al., 2014; Kinder & Elander, 2012; Peer & Reid, 2003). In regard to information processing, individuals with dyslexia may experience difficulties in any or all stages involved in processing information: input, cognition, and output (Andreou & Baseki, 2012; Kwok & Ellis, 2014; Peer & Reid, 2003). Visual problems may include blurring, distortions, or missing lines when reading (Cassim, Talcott, & Moores, 2014; Kronschnabel, Brem, Maurer, & Brandeis, 2014; Peer & Reid, 2003). While many students may experience difficulties in these areas, the main characteristic of dyslexia is a weakness in phonological awareness (Peer & Reid, 2003; Shaywitz, 2003; Torgesen, 2006). Therefore, dyslexia does not reflect an overall deficit in language, but a localized weakness in a specific component of the language system, which may be called the phonological module (Norton et al., 2014; Shaywitz, 2003). Phonological awareness refers to an awareness of: sounds and characteristics of sounds in words; where in a word sounds appear; and the general rhythm of words (Peer & Reid, 2003; Shaywitz, 2003). A phoneme is the fundamental element of the language system and the smallest unit of speech that distinguishes one word from another (Shaywitz, 2003). Before words can be identified or understood, they must be broken down into phonemes within the brain. In order to speak a word, the appropriate phonemes must be retrieved from an individual's lexicon (or

internal dictionary) and ordered appropriately (Levine, 2002; Shaywitz, 2003). For individuals with dyslexia, phonemes are less developed, leading to weaknesses in word recognition and consequently, reading, writing, and spelling (Aravena et al., 2013; Norton et al., 2014; Shaywitz, 2003; Torgesen, 2006). These individuals may order phonemes incorrectly, or experience difficulty in selecting the correct phoneme and retrieve one that is similar in sound instead (Andreaou & Baseki, 2012; Aravena et al., 2013; Shaywitz, 2003).

When an individual understands that both spoken and written words can be pulled apart based on their sounds, and that in print letters represent these sounds, the individual is considered to have mastered what is known as the *alphabetic principle* (Shaywitz, 2003). The decoding process (and therefore, word recognition) that occurs when individuals read is disrupted if individuals have not mastered the alphabetic principle (Levine, 2002; Peer & Reid, 2003; Shaywitz, 2003; Torgesen, 2006). Individuals with this phonological weakness may still comprehend what they are reading, however, their method for obtaining a text's meaning is unreliable since they may use other cues from the text to ascertain meaning (Levine, 2002; Massey, 2008; Shaywitz, 2003). Although individuals with dyslexia have severe phonological deficits, in general, they are still able to perform the higher-order intellectual abilities necessary for comprehension (i.e., discourse, syntax, reasoning; Shaywitz, 2003). However, these methods of obtaining meaning from a text are unreliable and it is possible that the individual is actually unsure about the exact meaning of the text (Levine, 2002; Shaywitz, 2003). Levine (2002) explained how and why this phonological deficit becomes problematic for individuals with dyslexia:

As they advance through school, individuals with diminished phonological awareness are apt to over utilize clues from sentences, engaging in a guessing game in which they gloss over some of the words due to their incomplete perceiving of the language sounds; they then strive to supply those missing words based on what would make sense. Such "betting on meaning" is far too time consuming, and, as school becomes increasingly removed from everyday contexts, the desperate guessing game gets harder to pull off. (p. 131)

Further, this weakness may lead to a reduction in reading rate due to slow decoding speeds or the need to reread sentences when words have been misread (Kwok & Ellis, 2014; Massey, 2008). Consequently, an individual may become reluctant to read from an early age, which is an attitude

that is often difficult to change, especially because the experienced difficulties are likely to persist (Massey, 2008).

2.1.1.1.1 Epidemiology of dyslexia. It is estimated that over 600,000 Canadians are diagnosed with dyslexia and that it is more prevalent in males at a ratio of 1.5:1, although more males are referred for services (Peterson & McGrath, 2009; Reilley, n.d.; Statistics Canada, 2012). Research has also found genetic comorbidity between Attention Deficit-Hyperactivity Disorder (ADHD) and dyslexia (Christo, Davis & Brock, 2009). In fact, researchers have documented that coordination (dyspraxia), attention control (ADHD), and emotional or behavioural problems are among the most common difficulties associated with dyslexia (Snowling, 2005). Further, evidence has suggested that an individual with an LD is "more likely to be assessed as having a second disability than would be expected based on the incidence of the disability in the general population" (Everatt & Reid, 2009, p. 12). Further, there is a growing body of evidence suggesting that comorbidity may be highly prevalent (Bishop & Snowling, 2004; Visser, 2003). For example, in the case of attention difficulties associated with dyslexia, Levine (2002) noted that this may be due in part to mental exhaustion experienced by individuals who have phonological deficits and must allocate more cognitive resources to decoding tasks.

2.1.1.1.2 Risk factors for dyslexia. Causal factors for dyslexia may be divided into three categories: (1) environmental factors, (2) genes, and (3) neurobiological structures (Christo et al., 2009). In regard to environmental factors associated with the development of dyslexia, little is known about specific environmental risk factors, but research has indicated that they may include the home language/literacy environment and instructional quality (Peterson et al., 2009). It has also been documented that the development of dyslexia is the result of an interaction between maturation or genetics and the environment, giving reason to the consideration of both of these factors together (Christo et al., 2009). In relation to genetic factors, results from studies of reading indicated that heritability influences the development of dyslexia, with estimates documented as 0.55 ± 0.22 (Christo et al., 2009). Regarding factors related to neurobiological structures, results have suggested that typical readers use different regions of the brain than dyslexic individuals. Typical readers activate the occipito-temporal areas in the back of the brain when reading, where the occipital cortex and the phonological loop develop neural connections to produce fluent reading (Christo et al., 2009). Research has indicated that individuals with dyslexia over utilize the left frontal and right frontal areas of the brain, where Broca's Area (most often associated

with phonological processing) and regions associated with visual memory and executive functions are located (Christo et al., 2009).

2.1.1.1.3 Assessment of dyslexia. Diagnosis of an LD is the process of applying the operational definition of a disorder to students and serves to: (1) provide teachers and parents with specific information about a student; (2) guide the development and implementation of appropriate interventions; (3) enhance the student's understanding of him or herself; and (4) allow for access to services and programs that support the development of the student (Everatt & Reid, 2009; Fletcher, Morris, & Lyon, 2003; Saskatchewan Learning, 2004). Pennington (2009) asserted that receiving a diagnosis may be therapeutic for parents and students, as it may provide an explanation for symptoms the student has been experiencing as well as a focus for the efforts that are being made to alleviate those symptoms.

In assessment that results in a functional diagnosis, consideration of the whole person may take the form of what is known as the four pillars of assessment: (1) clinical interview (with the student, parents, teachers, etc.); (2) formal testing (standardized tests); (3) informal testing; and (4) observation (Weis, 2008). Using these methods to assess an individual's functioning may provide a wealth of information regarding a student's strengths and weaknesses, severity of deficits, and context in which the difficulties occur. The consideration of evidence from multiple sources is necessary in order to provide appropriate and high-quality (i.e., functional) intervention or support for any student with academic difficulties (Riccio, 2008; Suhr, 2008; Taylor, 2006; Wodrich, & Schmitt, 2006).

However, a diagnosis involves more than a simple label; it can help to inform programming and other efforts to help these students succeed, and is therefore functional and useful within the area of special education (Balboni & Cubelli, 2011; Kemp & Korkman, 2008; Riccio, 2008; Taylor, 2006; Wodrich & Schmitt, 2006). As the possibility of a given student having dyslexia may not be identified until he or she enters school, educators may be the first individuals to recognize a student's difficulties. Specifically in the case of dyslexia, educators may note that the student demonstrates: semantic errors; hesitates or misses words; misses word endings; grammatical difficulties; spells phonetically; inconsistencies in spelling particular words; difficulty remembering instructions; inconsistent handwriting style; reluctance to write; poor organization in homework, notebook, or notes; organizing new facts and relating them to

previous learning; and/or sequencing letters, words, numbers, or instructions (Massey, 2008; Peer & Reid, 2003).

Due to the variation in symptoms individuals with dyslexia experience, identification of their unique needs is important for their achievement of academic success (Aravena et al., 2013; Gabor, 2010; Kinder & Elander, 2012). This need for identification is what drives the assessment process, which may, but not always, result in a formal diagnosis. As Saskatchewan Learning (2004) contended, "the purpose of a diagnosis is to better understand the abilities of students and to better inform instruction" (p. 15). As previously stated, one diagnosis that can co-occur with dyslexia is Attention Deficit Hyperactivity Disorder (ADHD).

2.1.2 Attention- and Behaviour-Related Disorders

Students in post-secondary education may also be diagnosed with disorders related to attention and behaviour. One specific example of such a disorder that is relevant to this study is Attention Deficit Hyperactivity Disorder (ADHD).

2.1.2.1 Attention Deficit Hyperactivity Disorder (ADHD). ADHD generally refers to a disorder present from childhood, and potentially persisting into adulthood, with individuals demonstrating marked difficulties within the areas of attention, (hyper) activity, and/or impulsiveness (Gillberg, 2014; McGoey et al., 2015; Parke et al., 2015). There are three subtypes of ADHD: (1) hyperactive-impulsive subtype, in which ADHD is dominated by hyperactivity and a lack of impulse control; (2) inattentive subtype (sometimes referred to as Attention Deficit Disorder [ADD]), in which ADHD is dominated by attention deficit; and (3) combined type, ADHD in combination with both attention deficit and hyperactivity/lack of impulse control (Gillberg, 2014; McGoey et al., 2015; Parke et al., 2015). Although all subtypes of ADHD cause functional impairment, hyperactive-impulsive and combined subtypes are usually associated with moderate to severe impairment, while inattentive subtype appears to have more variable clinical impairment (Efron et al., 2014; Friedman & Rapoport, 2015; Gillberg, 2014).

However, it should be noted that symptoms of ADHD are not inherently abnormal; characteristics are abnormal when they become excessive (Wender, 2001). Impairments resulting from ADHD may be considered in terms of role performance (Barry, Pinard, Barry, Garland, & Lyman, 2011; Efron et al., 2014; Brown, 2013). As an individual develops, they acquire and are expected to perform various roles. As a disorder that can permeate multiple aspects of an individual's life, ADHD is characterized by the intensity, persistence, and patterning of

symptoms in the individual (American Psychiatric Association, 2013; Wender, 2001). Individuals with this diagnosis may demonstrate a variety of difficulties in the following areas: attention, activity, alertness, stamina, emotional regulation, opposition or defiance, executive functioning, planning, sense of time, gross and fine motor movement, speech and language, perception, sleep, and memory (Efron et al., 2014; Gillberg, 2014; Jarrett, 2016; Sibley, Altszuler, Morrow, & Merrill, 2014; Wender, 2001). Further, a combination of fearlessness, tendency not to plan ahead, and impulsivity can lead to poor social interactions and relationships (Jarrett, 2016; Brown, 2013) and the social structure in schools exacerbate these difficulties (Efron et al., 2014; Wender, 2001). Brown (2013) stated that the “academic, social, and other adaptive impairments found in children and younger adolescents with ADHD often, but not always, tend to persist in later adolescence and adult years” (p. 49). At the post-secondary education level, these individuals may demonstrate difficulties with inattention, cognitive processes, impulsivity, or restlessness (Jarrett, 2016; Gilbert, 2005). Further, post-secondary students with ADHD may be more likely to withdraw from class, have poor study habits, difficulty with concentration and estimating time, as well as memory difficulties (Advokat, Lane, & Luo, 2011; Gilbert, 2005; Prevatt, Proctor, Baker, Garrett, & Yelland, 2011). Wilens et al. (2001) found that adults with ADHD have high rates of academic and occupational underachievement, social dysfunction, and psychopathology (i.e., anxiety disorders, depression, Obsessive-Compulsive Disorder (OCD), tic disorders, etc.).

2.1.2.1.1 Epidemiology of ADHD. The rate of ADHD is generally agreed to range between 4-8% of all school-age children and adolescents (Faraone et al., 2003; Langlois, Samokhvalov, Rehm, Spence, & Gorber, 2012; Polanczyk, de Lima, Horta, Biederman, & Rohde, 2007), with approximately half of this proportion recognizable within the preschool years (Gillberg, 2014; Langlois et al., 2012). These *preschool cases* may be among the most severe, tend to be the most persistent, and demonstrate ADHD, ADHD symptoms, and other consequences of the disorder in adulthood (Gillberg, 2014; Langlois et al., 2012). Biederman et al. (2011) suggested that most studies identified prevalence of ADHD in the adult population to range between 3-4%. This finding suggests that slightly less than half of all individuals who are diagnosed with ADHD in childhood *grow out of* their diagnosis or learn to compensate for their difficulties (e.g., increasing motor movement to facilitate neurocognitive function) by the time they reach early adulthood, although these adults may demonstrate ADHD symptoms for the

remainder of their lives even if they no longer meet diagnostic criteria for the disorder (Gillberg, 2014; Jadidian, Hurley, & Taber, 2015; Kessler et al., 2010; Sarver, Rapport, Kofler, Raiker, & Friedman, 2015; Wender, 2001). Until recently, the male-to-female ratio for ADHD was reported to be within the range of 2:1 or higher (Visser et al., 2014; Gillberg, 2014). However, recent research has suggested that females may have been missed for a correct diagnosis of ADHD in childhood and instead, came to the attention of specialists only after entering adolescence. For example, in a Swedish study, Kopp et al. (2010) found that the majority of girls with ADHD had their symptoms remain undetected for years in childhood or were misdiagnosed as suffering from depression, anxiety, and/or family relationship problems.

Research has indicated that most children, adolescents, and adults who meet diagnostic criteria for ADHD also meet criteria for at least one additional psychiatric disorder (i.e., depression and anxiety disorders, Bipolar Disorder, Oppositional Defiant Disorder [ODD], Conduct Disorder [CD], tic disorders, and Obsessive-Compulsive Disorder [OCD]) and that rates of these comorbid disorders are much greater among individuals with ADHD than those without ADHD (Abramovitch et al., 2015; Efron et al., 2014; Gillberg et al., 2004; Pehlivanidis et al., 2014). For example, Kessler et al. (2006) found that adults with ADHD up to age 44 years had more than six times the likelihood of having at least one other psychiatric disorder when compared with the general population. Moreover, between 8 and 76 percent of children with ADHD have an LD, although this variability may be attributed to the inclusion of writing disorders in some prevalence studies (Byron & Parker, 2002; DuPaul, Gormley, & Laracy, 2013; Wender, 2001). Researchers have found that ADHD can co-occur with Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), with associated aggressiveness and antisocial tendencies; adjustment disorders; mood disorders such as depression; anxiety disorders; as well as substance abuse disorders (Abramovitch et al., 2015; Efron et al., 2014; Gillberg et al., 2004; Pehlivanidis et al., 2014; Wender, 2001; Wilens et al., 2001).

2.1.2.1.2 Risk factors for ADHD. There are many factors related to the occurrence of ADHD. First, ADHD is a highly heritable disorder and twin studies have suggested that the heritability of ADHD is approximately 80% (e.g., Neuman, Todd, Heath et al., 1999). In fact, parents with ADHD have a greater than 50% chance of having a child diagnosed with ADHD and approximately 25% of children with ADHD have parents who also meet the diagnostic criteria for ADHD (Faraone & Doyle, 2001). In regard to genetic influences, Mick and Faraone (2008)

concluded that molecular genetic studies have shown that the genetic architecture of ADHD is complex and that gene studies of ADHD have produced evidence implicating several genes in the cause of the disorder, but that these associations are small. They proposed that these findings are “consistent with the idea that the genetic vulnerability to ADHD is mediated by many genes of small effects” (Mick & Faraone, 2008, p. 276). The influence of multiple prenatal, perinatal, and other environmental factors has also been investigated in the occurrence of ADHD. Results indicated that low birth weight, maternal stress, and exposure to toxic substances such as lead, pesticides, maternal cigarette smoking, maternal alcohol and drug abuse or dependence, and chemical PCBs increase the risk of ADHD (Bhutta, Cleves, Casey, Cradock, & Anand, 2002; Glover, 2011; Linnet et al., 2003). Further, Rutter, Cox, Tupling, Berger, and Yule (1975) found that in regard to the family unit, six risk factors correlated significantly with psychiatric disability in children: (1) severe marital discord; (2) low social class; (3) large family size; (4) paternal criminality; (5) maternal mental disorder; and (6) foster placement. Based on the evidence regarding the etiology of ADHD, it is clear that a more adequate understanding is needed. Nigg, Nikolas, and Burt (2010) suggested that future studies investigating the causal and risk factors for ADHD focus on gene-by-environment interactions. While inherited risk factors can directly contribute to ADHD, they are likely to “operate by increasing the likelihood of exposure to environmental adversity and altering sensitivity to environmental risks and protective factors” (Thapar, Cooper, Eyre, & Langley, 2013, p. 11).

2.1.2.1.3 Assessment of ADHD. Given the impairments associated with psychiatric disorders, receiving a diagnosis may serve multiple functions, such as informing a treatment plan to lessen or cope with symptoms, providing eligibility for access to supportive services, and informing educators, administrators, or supervisors that accommodations in a given context may be beneficial or required (American Academy of Pediatrics, 2011; Manos, 2010; Salmeron, 2009; Weisler & Goodman, 2008). An ADHD diagnosis is facilitated by a doctor’s examination and assessment from a psychologist, both with intimate knowledge and experience of typical development (Gillberg, 2014). This diagnostic process includes a developmental history interview, medical examination, neuropsychological exam, and may be complimented by questionnaires (e.g., Diagnostic Interview for Children and Adolescents [DICA: Reich, 2000] Behavior Assessment System for Children, Second Edition [BASC-2; Reynolds & Kamphaus, 2006], Child Behavior Checklist for Ages 6-18 [CBCL/6-18; Achenbach & Rescorla, 2001],

Conners' Adult ADHD Diagnostic Interview for DSM-IV [Epstein, Johnson, & Connors, 2001]) regarding the individual's behaviour (American Academy of Pediatrics, 2011; Gillberg, 2014; Salmeron, 2009; Weisler & Goodman, 2008). According to the *Diagnostic and Statistical Manual of Mental Disorders: DSM-5* (APA, 2013), at least some of the individual's symptoms of ADHD must have been present before the age of 12 years. However, during assessment, consideration of behavioural expectations in various stages of development is imperative (American Academy of Pediatrics, 2011). For example, it is expected that a toddler or young child be fidgety or restless, but this characteristic becomes less typical as the individual ages (Wender, 2001). Further, adolescents should be assessed for symptoms of substance abuse (American Academy of Pediatrics, 2011). Therefore, results of the diagnostic procedure are evaluated in comparison to other individuals of same chronological age (Brown, 2013; Gillberg, 2014). As previously mentioned, individuals who have a diagnosis of ADHD are very likely to meet diagnostic criteria for a mental disorder, such as Generalized Anxiety Disorder (GAD).

2.1.3 Mental Disorders

Students receiving post-secondary education may also be diagnosed with mental disorders that cause significant impairments in functioning. One specific example of such a disorder that is relevant to this study is Generalized Anxiety Disorder (GAD).

2.1.3.1 Generalized Anxiety Disorder (GAD). GAD generally refers a persistent pattern of behaviours in which an individual engages in excessive worry that is difficult to control (APA, 2013). Worry may be defined as an attempt to engage in mental problem-solving on an ambiguous issue with a potentially threatening outcome (Borkovec et al., 1983; Rachman, 2013). However, these attempts at problem-solving generally involve trying to prevent a dreaded event from occurring and leads to circularity (Rachman, 2013). Common areas of worry may include: family/home relationships; finances; work/school; illness/health; the future; success/failure; psychological/emotional; world issues; travel; or minor matters (Marker & Aylward, 2011; Rachman, 2013; Tyrer & Baldwin, 2006; Wu, Szpunar, Godovich, Schacter, & Hofman, 2015). The key difference between GAD and regular worry is that the worry is excessive (i.e., much more frequent) and difficult for the individual to control (Hallion & Ruscio, 2013; Nydegger, 2012). Further, the worries are not focused on one situation (e.g., feeling embarrassed), but extend across a number of events (Nydegger, 2012; Wu et al., 2015). GAD is generally diagnosed when the individual's worry causes significant impairment and distress in his or her life, causes

functional impairments across environments, and the anxiety and worry has persisted for longer than six months (APA, 2013; Nydegger, 2012). Spitzer et al. (1995) found that individuals with anxiety disorders have significant impairment in three major areas: (1) social functioning, (2) role functioning, and (3) mental health. In regard to functioning in adult populations with GAD, researchers have identified GAD as one of three disorders associated with higher levels of disability in occupational role dysfunction, self-reported physical disability, and number of disability days than all other diagnostic categories (Ormel et al., 1994; Koury & Rapaport, 2007; Newman, Llera, Erickson, Przeworski, & Castonguay, 2013).

GAD is also accompanied by various physical signs, such as elevated arousal and muscle tension, nausea, perspiring, dry mouth, urinary frequency, tension headaches, difficulty swallowing, and a queasy stomach (Brosschot, Van Dijk, & Thayer, 2007; Pieper, Brosschot, Van Der Leeden, & Thayer, 2010; Portman, 2009; Rachman, 2013). Rachman (2013) described that individuals with GAD are generally hyper vigilant and restless, as if they are waiting for some unfortunate event to occur. Individuals diagnosed with GAD tend to become irritable and tired easily and have difficulty concentrating and in the educational environment, and particularly at the post-secondary level, these characteristics can cause serious impairment (e.g., Jarrett, Black, Rapport, Grills-Taquichel, & Ollendick, 2015). For example, post-secondary programs generally require that students spend a lot of time reading or studying, completing assignments, and/or preparing for exams, all of which require sustained attention. Given that individuals with GAD tire easily and have difficulty concentrating, meeting the demands of any educational program may be more difficult for those with this diagnosis (Jarrett et al., 2015). Further, researchers have demonstrated that in comparison to those without GAD, individuals with this diagnosis reported higher levels of intolerance for distressing experiences including: uncertainty, negative emotions, ambiguity, frustration, physical discomfort, and the consequences of anxious arousal (e.g., MacDonald, Pawluck, Koerner, & Goodwill, 2015). Based on this research and the finding that individuals with GAD tend to have poor strategies in place to cope with their problems (e.g., avoidance, procrastination, and poor problem-solving skills; Gliatto, 2000), students with GAD may experience significant challenges in the post-secondary environment.

2.1.3.1.1 Epidemiology of GAD. Approximately 75% of individuals diagnosed with GAD trace its onset to childhood or adolescence (Angst, Gamma, Baldwin, Ajdacic-Gross, & Rossler, 2009). Lifetime prevalence of the disorder is estimated at 5-6% (Clark & Beck, 2010; Kessler,

Berglund, Demler, Jin, & Walters, 2005) and about 12% of all individuals attending anxiety disorder clinics are diagnosed as having GAD (Barlow, 1988). Results from clinical studies and community epidemiological surveys have indicated that GAD is a chronic condition in which episodes often last for ten years or more (Blazer, Hughes, George, Swartz, & Boyer, 1991; Mancuso, Townsend, & Mercante, 1993; Newman et al., 2013; Noyes, Holt, & Woodman, 1996; Rodriguez, Weisberg, Pagano, Bruce, & Spencer, 2006). Symptoms do appear to wax and wane over time, but GAD is generally chronic unless some form of treatment is received (Newman et al., 2013; Marker & Aylward, 2011). Moreover, women are twice as likely as men to be diagnosed with GAD (Portman, 2009). Possible explanations for this difference may include cultural pressures (i.e., individualism and power distance/distribution; Crocetti et al., 2015), hormonal differences, and a higher rate of reporting anxiety (Roe-Sepowitz, Bedard, & Thyer, 2005).

Further, GAD is known to be highly comorbid with other mental disorders and within general population studies, 90% of individuals with the diagnosis meet diagnostic criteria for another disorder under the DSM-5, while in clinical studies, between 45% and 98% of individuals with GAD have one or more comorbid disorders (Carter, Wittchen, Pfister, & Kessler, 2001; Holoway, Rodebaugh, & Heimberg, 2006; Kessler et al., 2010; Nett et al., 2011). GAD may co-occur with such disorders as: depression; panic disorder with or without agoraphobia; social anxiety; Obsessive-Compulsive Disorder (OCD); Posttraumatic Stress Disorder (PTSD); and specific phobia (Carter, Wittchen, Pfister, & Kessler, 2001; Portman, 2009; Rachman, 2013; Zbozinek et al., 2012). Individuals with GAD and panic disorder may also suffer from panic attacks during which they experience severe and frightening symptoms such as pounding heart, dizziness, nausea, breathing difficulties, chest pains (Van Ameringen & Simpson, 2013; Nydegger, 2012). Clark (1986) asserted that panic attacks are the product of catastrophically misinterpreting autonomic arousal sensations that occur in the context of nonpathological anxiety as well as overreacting to other sources of arousal such as illness, exercise, or the ingestion of certain substances. Van Ameringen and Simpson (2013) found that 20% of their sample with GAD experienced panic attacks. An example of a specific phobia that may co-occur with GAD is Agoraphobia, which is characterized by anxiety about being in environments or situations from which escape may be difficult or embarrassing, or where help may not be available during a panic attack (Nydegger, 2012). In fact, Nydegger (2012) outlined

that those individuals who repeatedly experience panic attacks can be impaired by restricting activities and avoiding situations out of fear of having a panic attack, which may subsequently lead to the development of Agoraphobia. However, the co-occurrence of GAD (with or without panic attacks) and Agoraphobia is relatively unexplored within the literature (e.g., Amerigen & Simpson, 2013).

2.1.3.1.2 Risk factors for GAD. Several factors that may influence the development and maintenance of anxiety disorders have been identified. Research has suggested that risk factors may be biological, behavioural, psychological, and social (e.g., Beesdo, Pine, Lieb, & Wittchen, 2010; Hettema et al., 2012; Nydegger, 2012; Soenke, Hahn, Tull, & Gratz, 2010; Vasiliadis, Buka, Martin, & Gilman, 2010). For example, in one study exploring the overlap between depression, other anxiety disorders, and GAD, researchers found that parental GAD, behavioural inhibition, childhood separation events, and parental overprotection were associated with a diagnosis of GAD (Beesdo et al., 2010). In another study examining the risk of developing diagnosed GAD, researchers found that lower birth weight was a risk factor, although it was unclear whether there was a certain threshold below which the risk for GAD is increased (Vasiliadis et al., 2010). In Hettema et al.'s (2012) twin neuroimaging study, results revealed that genetic risk factors related to GAD were likely correlated with volumetric and spectroscopic changes in limbic structures and their connections with the frontal cortex (e.g., metabolite changes in the amygdale and hippocampus and smaller hippocampal volume). Results from these examples of studies examining the etiology of GAD suggest that multiple risk factors exist and are unlikely to operate in isolation to cause GAD. Researchers have postulated that these risk factors contribute to the development of GAD, but the extent to which each factor contributes is unclear (e.g., Barlow, 2002; Newman et al., 2013; Tyrer & Balwin, 2006). For example, Barlow (2002) explained that a general psychological vulnerability or a general neurobiological vulnerability is unlikely to cause GAD, but that instead, "one is likely to see a personality style characterized by some combination of arousability, pessimism, low self-confidence and esteem, and lack of initiative – or perhaps, no obvious manifestations" (p. 499).

2.1.3.1.3 Assessment of GAD. According to the DSM-5 (2013), a diagnosis of GAD is appropriate for an individual who presents with three or more of the following six symptoms: restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and sleep disturbance (APA, 2013). Further, symptoms must be present for a period of six months or more (APA,

2013). Multiple researchers recommend a dimensional assessment process for the diagnosis of GAD (e.g., Capozzoli, Hayes-Skelton, Aderka, & Hofman, 2013; Fisher, 2015; Rutter & Brown, 2015). In fact, Marker and Aylward (2011) outlined a number of areas to be considered regarding a diagnosis of GAD, including: (1) situational triggers; (2) physical features; (3) information processing; (4) cognitive avoidance strategies; (5) intolerance of uncertainty; (6) beliefs about the function of worry; (7) interpersonal issues; (8) behavioural avoidance; and (9) metaworry. These areas help to determine whether a diagnosis of GAD is appropriate and also have implications for treatment strategies (Fisher, 2015). Information about each of these areas in an individual's life help to appropriately and differentially diagnose the anxiety or worry the individual is experiencing and its resulting impairments in functioning (Capozzoli et al., 2013; Fisher, 2015). While there is overlap between GAD and other anxiety/mental disorders, there are specific features that are indicative of GAD, including: the experience of muscle tension and other physiological symptoms; worrying about minor matters; worrying to avoid deeper processing of negative emotions; seeking reassurance from others to gain certainty and avoid distress; the individual worrying about how much they worry (i.e., metaworry); and the functional impairments the individual experiences as a result of their anxiety (Brosschot et al., 2007; Marker & Aylward, 2011; Zbozinek et al., 2012).

Given the overlap of symptoms between GAD and other anxiety/mental disorders, differential diagnosis is important (e.g., Zbozinek et al., 2012). In fact, there is little contention regarding GAD as one of the most difficult disorders to assess and diagnose with significant consistency (Beesdo et al., 2010; Crocetti et al., 2015; Holmes & Newman, 2006; Zbozinek et al., 2012). A variety of assessment tools have been used to assess individuals for GAD, including: clinical interview/evaluation, structured interviews, and self-report measures and inventories (e.g., Brown & Barlow, 2014; Lovibond & Lovibond, 1995; Meyer, Miller, Metzger, & Borkovec, 1990; Williams, Karg, & Spitzer, 2015). However, standard practice in the diagnostic procedure involves first ruling out any medical condition that could be associated with anxiety, such as cardiac, pulmonary, neurologic, or endocrine illnesses, and hypothyroidism (Goldberg & Posner, 2000; Portman, 2009). Assessment tools used in assisting the diagnostic process may include: the Life Context Interview, The Anxiety and Related Disorders Interview Schedule for DSM-5 (ADIS-5L; Brown & Barlow, 2014), and The Structured Clinical Interview Schedule for DSM-5, Clinician Version (SCID-5-CV; First, Williams, Karg, & Spitzer, 2015). Self-report

measures may also be included, such as the Depression Anxiety Stress Scales (DASS; Lovibond & Lovibond, 1995), and the Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990).

It is evident that students with exceptional needs experience a number of symptoms that can affect multiple domains of functioning (e.g., Efron et al., 2014; Gillberg, 2014; Hahn et al., 2014; Jarrett, 2016; Kwok & Ellis, 2014; Sibley et al., 2014). This means that students with these disorders may find it difficult to be successful in an educational setting, such as a post-secondary institution (e.g., Jarrett et al., 2015; Massey, 2008; Tyrer & Baldwin, 2006; Wu et al., 2015). In fact, these students may find that their symptoms interfere with their functioning to such a degree that they discontinue their education, thereby increasing their risk for some negative outcomes (e.g., low job satisfaction, unemployment, illegal activity; Dowrick & Crespo, 2005; Maynard, Salas-Wright, & Vaughn, 2015; Wolf, 2001; Koury & Rapaport, 2007; Newman et al., 2013).

2.2 Exceptionalities and School Drop-Out

The issue of dropping out of school is especially salient for students with learning, attention, emotional, and/or behavioural disorders given the functioning difficulties students with these types of disorders experience. Students with learning, emotional, or behavioural disorders are significantly less likely to graduate from high school and post-secondary school than their same-age peers (Barkley, Murphy, & Fischer, 2008; Scanlon & Mellard, 2002). Bost and Riccomini (2006) concluded that “school dropout remains one of the most serious and pervasive problems facing students with disabilities nationally” (p. 301). In fact, approximately 28% of students with disabilities do not complete high school (National Longitudinal Transition Study-2, 2005). In one study, researchers indicated that between 2003 and 2008, the high school graduation rate for students with behaviour disorders only slightly increased from 15.6% to 16.6% (Goodman, Hazelkorn, Bucholz, Duffy, & Kitta, 2011). The significance of these findings becomes apparent when examining literature regarding student outcomes. A number of researchers have demonstrated that dropping out of high school has a significant impact on the quality of life in adulthood (e.g., Bowlby & McMullen, 2005; Dowrick & Crespo, 2005; Gilmore, 2010; Maynard et al., 2015). Not only are dropouts with behaviour disorders more likely to engage in illegal activity (i.e., larceny, assault, drug possession or sales), but they are also more likely to be unemployed and maintain a lower level of job satisfaction (Dowrick & Crespo, 2005; Gilmore, 2010; Maynard et al., 2015). Between 2009 and 2010, 23.2% of high school dropouts were unemployed in Canada, compared to 11.9% for those with a high school diploma (Gilmore,

2010). Maynard, Salas-Wright, and Vaughn (2015) found similar results in their study of high school dropouts in the United States, revealing that high school dropouts were significantly less likely to report being employed either full-time or part-time. This is consistent with unemployment information reported for 2004 and 2005; the unemployment rate for dropouts was double that of high school graduates (Bowlby & McMullen, 2005). Further, individuals with behaviour disorders take longer to find employment and hold multiple short-term jobs, rather than steady full-time employment, demonstrating poor long-term employment activity (Flick, 2011). In a more general sense, adolescents who drop out are also more likely to earn less money than those who graduate and be on public assistance (Christle et al., 2007).

For students with exceptionalities who overcome obstacles in high school, graduate, and continue their education at the post-secondary level, the rate of program completion is still lower than that of students without exceptionalities (e.g., Farrell, 2011; Scanlon & Mellard, 2002; Wolf, 2001). For example, Wolf (2001) stated that “nearly half of all disabled students drop out compared with one-third of students without disabilities” (p. 387). She added that the dropout rate increases to approximately two-thirds for students with learning disabilities or “other,” including ADHD and psychiatric disabilities (Wolf, 2001). Indeed, Heisserer and Parette (2002) identified students with disabilities as one of several groups considered at-risk for post-secondary non-completion. For example, in the United States, approximately 4.7% (5 million students) drop out of post-secondary education every year due to mental illness (O’Keeffe, 2013). While many studies have examined factors related to school drop-out in high school samples, research involving samples of post-secondary students with exceptionalities is lacking. For example, studies whose findings encourage the promotion of students' positive school attachment largely involve samples of students who are enrolled in elementary, middle, or high school, with few examining this phenomenon in post-secondary samples. Understanding how school bonding is experienced by this particular group of students may be valuable in promoting the positive effects associated with school bonding in students who are less likely to bond with and more likely to drop out of school (Farrell, 2011; Heisserer & Parette, 2002; Scanlon & Mellard, 2002; Shepler & Woosley, 2012).

In studies of high school students with behaviour disorders, a number of researchers have identified school-related factors that influence students' decision to drop out or stay in high school (e.g., Christle et al., 2007; Dowrick & Crespo, 2005; Farrell, 2011; Flick, 2011; Scanlon

& Mellard, 2002; Sinclair et al., 2005; Osher et al., 2003). Results from a number of studies have indicated that school dropout may be due to a variety of factors, including: academic difficulties (Farrell, 2011; Flick, 2011; Scanlon & Mellard, 2002); mobility, referred to as a student moving from one program or school to another (Osher et al., 2003); and schools operating under exclusionary discipline principles, as a positive relationship between rates of suspension and dropout has been demonstrated (Christle et al., 2007). Research has also shown that educators have a great deal of influence on students' decisions to drop out of school (e.g., Avrimidis & Norwich, 2002; Christle et al., 2007; Cook & Cameron, 2010; Kortering & Braziel, 1999; O'Connor et al., 2011; Riley & Docking, 2004). For example, results from one study of disengaged secondary students demonstrated that only one in three students felt that most or all teachers knew and understood them, listened to their views, and treated them fairly (Riley & Docking, 2004). How these factors affect post-secondary students with exceptionalities is largely understudied. Although the research base is growing, there appears to be a focus on factors implicated in student retention and related to adjustment to and support available within post-secondary education settings (e.g., Dwyer, 2000; Gilbert, 2005; Getzel, 2008; Hadley, 2007; Kaminski et al., 2006; Mortimore & Crozier, 2006; O'Keeffe, 2013; Pino & Mortari, 2014; Taylor et al., 2009; Trammel, 2003; Wilmhurst et al., 2011).

For example, O'Keeffe (2013) suggested that a sense of belonging was critical for student success in higher education, especially among students at risk for drop out, such as students with disabilities or mental health difficulties. There is also evidence to suggest that students who feel connected to school not only do better academically, but show better developmental outcomes as well (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004). For example, bonding to school in the elementary and middle school years was found to have a negative effect on violence in middle school through to age 21 years, as well as a reduced chance of school misbehaviour, grade repetition, and school dropout (Catalano et al., 2004). Seven elements that have been found to influence students' attachment to school, include: (1) having a sense of belonging within the school; (2) liking school; (3) perceiving teachers as supportive; (4) having good friends at school; (5) being engaged in one's own current and future academic progress; (6) believing that discipline is effective and fair; and (7) participating in extracurricular activities (Klem & Connell, 2004). Pino and Mortari (2014) also suggested that at the post-secondary level, faculty's awareness of

and rapport with students with dyslexia can motivate students to overcome barriers they experience and contribute to a positive learning experience.

Numerous researchers have also investigated the impact and perception of available academic accommodations for post-secondary students with diverse learning needs (e.g., Getzel, 2008; Hadley, 2007; Pino & Mortari, 2014; Trammel, 2003). In her qualitative study, Hadley (2007) found that students with dyslexia or reading problems viewed the continuous use of academic services available as necessary for transitioning from high school to post-secondary education. While students reported requesting supports in order to meet academic demands in higher education (i.e., extra time on exams, writing assistance, and utilizing note-takers), they were critical of the level of accommodations available and reported feeling challenged in being able to meet academic demands (Hadley, 2007). Consistent with these perspectives, Mortimore and Crozier's (2006) study investigated accommodations and supports for students with dyslexia, in which participants expressed perceived shortcomings in the supports provided on campus, including, "the time delay in official recognition and establishment of arrangements for their difficulties, and the lack of communication between academic departments and support units" (p. 249). However, Getzel (2008) identified the following key characteristics of post-secondary education programs that help students with exceptionalities continue their education: (1) services that help to develop students' self-determination; (2) teaching of self-management skills; (3) exposure to assistive technology; (4) promotion of career development through career-related experiences; (5) faculty with awareness and knowledge about the needs of various types of learners; and (6) faculty who incorporate concepts of universal design into their instruction. Further, Dwyer's (2000) qualitative study of four women with Attention Deficit Disorder (ADD) attending post-secondary education identified four areas needing improvement within the post-secondary setting in order to facilitate academic success for these individuals: (1) education, awareness, and understanding of ADD, for both faculty and students, including those students diagnosed with the disorder; (2) effective communication between faculty and students; (3) self-advocacy skills and learning strategies; and (4) postsecondary preparation. Based on these studies, accommodations are available for students at the post-secondary level, but students may remain critical about the impact of utilizing them as they are prescribed, providing feedback about areas perceived as needing additional improvement.

However, post-secondary students with diverse learning needs may also use self-directed coping strategies to overcome barriers to success in higher education. For example, in a study of 68 post-secondary students with ADHD, participants reported using a number of methods to cope their ADHD-related difficulties, such as: working harder and longer than other students (78%); using some type of social support (52%); specific study, time management, and organizational skills (40%); exercise (38%), spirituality and/or religion (26%); maintenance of a positive attitude (26%); and self-awareness and/or therapy (21%) (Kaminski et al., 2006). These results suggest that success for students with diverse learning needs in the post-secondary education setting is not achieved by using academic accommodations in isolation, but that students put forth significant effort to independently engage in behaviours that they perceive as facilitating academic success.

While these studies may help to identify and describe factors that can lead to better student retention and therefore, program completion, for those students with diverse learning needs, more research is needed examining specific exceptionalities (e.g., Demery et al., 2012; Mullins & Preyde, 2013). For example, research including samples of students with anxiety or mood disorders is lacking while more attention in the research has been given to students with LD and ADHD (e.g., Demery et al., 2012). Given that anxiety disorders may be considered chronic and individuals with this diagnosis may present with significant challenges across multiple domains of functioning (APA, 2013; Spitzer et al., 1995), exploring these students' experiences may provide further knowledge regarding factors that may facilitate post-secondary completion. Further, students' own expressions of their educational experiences are often excluded in research regarding post-secondary drop-out and retention.

2.3 Resilience

Given the difficulties students with exceptionalities may encounter in the post-secondary environment and their likelihood of dropping out, the concept of resilience may be an important lens through which to view why some students with exceptionalities decide to enroll and stay in programs at post-secondary institutions. Resilience refers to "positive adaptation in the context of significant challenges, variously referring to the capacity for, processes of, or outcomes of successful life-course development during or following exposure to potentially life-altering experiences" (Masten et al., 2009, p. 119). For example, wars, traumatic experiences such as rape or extreme violence, and the development or diagnosis of a psychological disorder may be

considered adversities that could be life-altering. Moreover, resilience only exists in the face of adversity; individuals are not considered resilient if they have never experienced serious threats to development (Masten, 2001). Experiences or circumstances may only be considered threats to development if their occurrence would be expected to derail typical and healthy development, such as parental maltreatment, violence, low socioeconomic status, or family history of a psychotic disorder (Masten, 2001). Masten and Powell (2003) contended that “resilience is an inference about a person’s life that requires two fundamental judgments: (1) that a person is ‘doing okay’ and (2) that there is now or has been significant risk or adversity to overcome” (p.4). This concept fits when considering the experiences of individuals with learning, attention, emotional and/or behavioural difficulties attending post-secondary institutions since these individuals may be at risk for poor developmental outcomes, such as school dropout, as a result of their diagnosis. Within this framework, these diagnoses act as vulnerabilities, which refer to states resulting from the presence of risk factors that increase the odds of maladaptive behaviour (e.g., dropping out of school; Masten, 2014; Masten & Powell, 2003).

Masten and Powell (2003) outlined four key tenants of resilience. First, resilience typically arises from common adaptation systems (i.e., using resources gained from attachment, mastery motivation [satisfaction gained from a person’s agency and accomplishment; Masten & Cicchetti, 2016], self-regulation, cognitive development, family, spiritual and cultural belief systems, communities, education systems, and social networks; Masten, 2014) as opposed to rare or extraordinary processes (i.e., resilience *causing* an individual to do well in the face of adversity; Masten & Powell, 2003). Secondly, these systems are a result of a history of biological and cultural evolution that has equipped individuals with tools of adaptive functioning (i.e., extended families, religious systems, and other social systems; Masten & Powell, 2003). Third, Masten and Powell (2003) asserted that as these systems develop, adversity may cause harm to the development of key adaptation systems, but sustaining or restoring conditions essential for cognitive and social development is important for protecting development and promoting resilience. Lastly, attention to the adaptive systems that promote healthy development has potential to guide policy and practice (Masten & Powell, 2003). If threats are individuals’ adversities which undermine the development and operation of human adaptation systems, promoting competence and resilience in people at risk may be best for protecting, restoring, and facilitating these powerful tools of human adaptation (Masten & Powell, 2003; Yates, Egeland, &

Sroufe, 2003). Therefore, resilience arises out of *ordinary magic*, meaning that the capacity to develop resilience exists in everyone, as adaptive responses to threats to development can be learned (Masten, 2014; Masten & Powell, 2003).

Masten and Powell (2003) also outlined two main approaches that research can take when investigating resilience: variable-focused approaches and person-focused approaches. Variable-focused approaches focus on “the links among competence, adversity, and a host of potential protective factors indexed by variables that describe differences among individual children and the nature of their relationships and interactions with the world in which they live” (Masten & Powell, 2003, p. 10). In contrast, person-focused approaches “focus on identifying people who meet definitional criteria for resilience, whose lives and attributes are then studied by investigators, particularly in comparison to maladaptive individuals who have similar levels of risk or adversity but who display markedly different outcomes” (Masten & Powell, p. 11). Although the person-focused strategy is less sensitive than a variable-focused approach in terms of identifying specific areas of competence, person-focused strategies are valuable for providing information about how resilience occurs naturally (Masten, 2001; Masten & O’Connor, 1989).

In studies of resilient youth, outcomes are typically assessed in the following domains: academic achievement, conduct, peer acceptance and friendship, normative mental health, and involvement in age-appropriate activities (Masten et al., 2009). The current study centered on the domain of academic achievement which, in the context of this study, can be understood as the individual's choice to continue their education despite the hardships they experience in the post-secondary setting as a direct or indirect result of their diagnosis. Therefore, in the context of this descriptive study, those positive school experiences that an individual describes as influencing his or her decision to enroll and remain in university may be viewed as protective factors.

Resilience is best “perceived as a label that defines the interaction of the individual with trauma or a toxic environment in which success, as judged by societal norms, is achieved by virtue of the individual's abilities, motivations, and support systems” (Condly, 2006, p. 213). Past research has outlined a number of individual (e.g., intelligence, problem-solving skills, self-regulation, motivation to succeed), family (e.g., effective caregiving, parenting quality), and community (e.g., effective neighbourhoods, collective efficacy, faith, hope, belief that life has meaning) variables that may be considered protective factors for resilience in children and youth (Masten, 2014; Masten et al., 2009). However, individuals evaluate their experiences differently

from one another and resilience must be viewed in a relativistic manner as well (Giordano, 2010; Masten & Wright, 2010). A study of delinquent boys and girls revealed that not only is resilience a process, but success as a result of that resilience must be conceptualized in relative and multi-dimensional terms (Giordano, 2010). Stories of two participants from this study illustrate the variable nature of positive adaptation:

Dave is not an academic high achiever, but he is proud that he has a good work history at Wal-Mart and has proved to his mother that he can make it on his own. On the other hand, Dana, who received a full scholarship to and currently attends a prestigious private university, is undoubtedly the highest academic achiever in the entire study...But Dana has recently taken on the care of her crack-addicted sister's children, is enmeshed in a tempestuous relationship with her unemployed boyfriend, and has mental health issues that threaten to derail her considerable academic achievements. (Giordano, 2010, p. 166)

This example shows that manifestations of resilience occur on a relative scale and may not be easily disentangled from experiences of adversity (Kolar, 2001). Moreover, this description demonstrates what Masten and Powell (2003) referred to as a person-focused approach because it shows how resilience differs across the two participants and how a resilient pattern may be defined for both individuals. Traditionally, the study of positive outcomes for youth with emotional and behaviour disorders has focused on the reduction of both symptom severity and exposure to adverse family, educational, and environmental phenomena (Goldstein & Rider, 2005). While the research base regarding adverse educational events appears to be growing, little research has been conducted on the positive experiences post-secondary students with learning, attention, emotional or behavioural difficulties have encountered to help them build resilience and experience academic success (e.g., Demery et al., 2012; Mullins & Preyde, 2013). Future investigations of resilience may help to explain how naturally occurring resilience operates and whether these processes can be initiated by design in policies or practice (Masten et al., 2009; Ong, Bergman, & Chow, 2010). This study sought to understand what perceived school-related factors contribute to the development of resilience in post-secondary students with learning, attention, emotional or behavioural difficulties who have decided to stay in school. By viewing the school experiences of post-secondary students within a resilience framework, this study contributes to the research exploring resilience as an ordinary, rather than extraordinary, process.

Additionally, this resilience framework offers a more positive outlook on human development and adaptation (Masten, 2001). Finally, this study may also provide support for the strengths-based educational policy and practice that has recently become dominant within the fields of educational psychology and special education.

2.4 Summary

The persistent difficulties demonstrated by post-secondary students diagnosed with learning, attention, emotional, and/or behaviour disorders have significant implications for the daily functioning of these individuals (Gliatto, 2000; Levine, 2002; Ormel et al., 1994). Researchers have identified a number of risk factors associated with these diagnoses, including heritability, genetics, and environmental factors, although the extent to which each factor contributes to these disorders is not entirely clear (e.g., Barlow, 2002; Christo et al., 2009; Newman et al., 2013; Thapar et al., 2013; Tyrer & Balwin, 2006).

As a result of their related difficulties, these students are twice as likely as their peers without disorders to drop out of school (Scanlon & Mellard, 2002; Wolf, 2001). While many studies of high school samples have investigated factors related to school drop-out, studies involving samples of post-secondary students appear to focus on factors related to student retention as well as available support within and adjustment to post-secondary education (Dwyer, 2000; Gilbert, 2005; Getzel, 2008; Hadley, 2007; Kaminski et al., 2006; Mortimore & Crozier; O'Keefe, 2013; Pino & Mortari, 2014; Taylor et al., 2009; Trammel, 2003; Wilmhurst et al., 2011). However, knowledge of *how* these factors affect students with learning, attention, and/or behaviour difficulties or disorders is limited. For example, youths who demonstrate positive school attachment may be less likely to drop out of school, yet how this bonding process occurs in a population of post-secondary students with learning, attention, emotional, and/or behaviour difficulties or disorders is relatively unknown (e.g., Klem & Connell, 2004; Thurlow, 1995). Therefore, the concept of resilience is a useful lens through which to view why some students with learning, attention, emotional, and/or behaviour disorders decide to stay in school (e.g., Masten, 2001).

How positive adaptation occurs for these students despite their diagnosis is largely understudied (Demery et al., 2012; Mullins & Preyde, 2013). In order to develop appropriate programs and accommodations that will help these individuals graduate from school, it is necessary to examine the experiences of those students directly from their perspectives. These

perspectives help to provide a better understanding how individuals with learning, attention, emotional, and/or behaviour difficulties believe their school experiences have affected their decision to stay in school (e.g., Demery et al., 2012; Mullins & Preyde, 2013; O’Keeffe, 2013; Shepler & Woosley, 2012). Further, this information adds to existing knowledge of how educators, school administrators, parents, and all of those who work with these students can continue to address and improve students' potential for success in the completion of post-secondary training (e.g. Demery et al., 2012; Mullins & Preyde, 2013). Gaining an understanding of the school-related experiences of post-secondary students with learning, attention, emotional, and/or behaviour disorders by exploring positive factors contributing to the decision to stay in school may help to fill this gap in the literature and contribute to research related to resilience as stemming from the positive experiences these students have encountered.

CHAPTER 3: METHODOLOGY

3.1 Rationale for Qualitative Methodology

This study took a qualitative approach in answering the research questions. The aim of qualitative research is to understand "how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (Merriam, 2009, p. 5). Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social problem and provide rich detail about it. Moreover, findings in qualitative research are presented as themes or categories (Merriam, 2002; 2009). Merriam (2002; 2009) identified four characteristics of qualitative research that set it apart from quantitative research. First, the focus in qualitative research is on meaning and understanding. Researchers therefore strive to achieve an understanding of how people make sense of their experiences. Secondly, in qualitative research, the researcher is the primary instrument for data collection and analysis (Merriam, 2002; 2009). The ability for humans to be immediately responsive and adaptive corresponds with the research goal of understanding the experiences of others. Qualitative research is also an inductive process. A qualitative researcher combines and orders data gathered from interviews, observations, or documents into larger themes as the researcher works from the particular to the general (Merriam, 2002; 2009). Finally, the product of qualitative inquiry is richly descriptive. The goal of qualitative research is understanding, since there are likely to be descriptions of the context, the participants involved, and the activities of interest (Merriam, 2009). Further, data, which may be in the form of quotes from documents, field notes, and/or participant interviews, are always included to support the findings of the study. Not only does this contribute to the descriptive nature of the research, but it also shows that the findings are grounded in the data.

The present study used a basic interpretive qualitative research approach to explore the school experiences of post-secondary students with learning, attention, mood, emotional and/or behaviour disorders, with the intention of improving current understanding of how academic success is achieved among these individuals. The research questions that guided this inquiry included:

1. What are the school experiences of undergraduate students with learning, attention, mood, or behaviour disorders? and

2. What school-related factors contribute to these students' decision to stay in school?

3.2 Basic Interpretive Qualitative Research

Merriam (2002) defined an interpretive qualitative approach as “[l]earning how individuals experience and interact with their social world [and] the meaning it has for them” (p. 4). A basic interpretive qualitative research approach was used to understand individuals' educational experiences and how they make meaning of their experiences in relation to their academic success (Merriam, 2002). This approach suggests that social reality is constructed differently by different individuals as they build their own understanding of the world through experiences and maturation (Gall, Gall, & Borg, 2007; Merriam, 2002), which holds participants' points view as the most significant piece in the construction of meaning regarding their experiences (Leedy & Ormrod, 2005). Therefore, data in a basic interpretive qualitative study are collected from interviews, observations, or document analysis (Merriam, 2002). Data analysis using this approach “involves identifying recurring patterns (presented as categories, factors, variables, or themes) that cut through the data (Merriam, 2002, p. 38). In regard to this study, there are a number of advantages to using this method for data analysis, including: its flexibility; ease with which it can be learned; accessibility to researchers with little experience in qualitative research; the results are usually accessible to a wide audience; and it can be useful in informing policy (Braun & Clarke, 2006). The findings from a basic interpretive study are a combination of the recurring patterns in the data and the data from which they came (Merriam, 2002). *Thick description* refers to a complete and literal description of the phenomenon under study. Within the context of this study, the aim is to produce a thick description of the school experiences of undergraduate students with learning, attention, emotional, and/or behaviour disorders and how they relate those experiences to their decision to stay in school.

This study is logically situated within the constructivist paradigm as the assumptions inherent in this paradigm closely match the focus of the study and what knowledge was gained from the results. This study aims to understand the school experiences of students with learning, attention, emotional and/or behaviour disorders, which can only be understood by hearing how these students construct meaning out of their experiences. According to Denzin and Lincoln (2011), the ontological assumption of constructivism is that the nature of reality is relativistic. Therefore, a phenomenon does not simply exist in an objective sense but instead exists in a

subjective way, meaning that there is no absolute truth about reality. Reality is produced and re-produced by those people who assign meaning to it and it is specific to context (Denzin & Lincoln, 2011). For example, understanding students' school experiences does not involve the search for some objective truth, but instead involves the students' perceptions, thoughts, feelings, and opinions. The goal here was to understand how students are making sense of their experiences, which exist in relation to other experiences they have had. Further, this meaning was mediated by the researcher, who interpreted the data within a resiliency framework, as a basic qualitative study is always framed by a disciplinary-specific concept, model, or theory (Merriam, 2002).

The epistemological assumption of constructivism is that knowledge is transactional and subjective (Denzin & Lincoln, 2011). Therefore, people gain knowledge through series of transactions with their social world, but the knowledge each person gains is different. This is because knowledge is highly context-specific. In the context of this study, students with learning, attention, mood, and/or behaviour disorders gain knowledge through interactions, or transactions, with their social world, part of which is school. However, this knowledge is context-specific because it is dependent on the location and time of the interaction. Students with learning, attention, emotional, and/or behaviour disorders will not always have the same experiences within the school setting since their interpretation of the experiences or interactions depends on contextual factors. This paradigm is interpretative in nature, and just as the students have interpreted their experiences, the researcher has interpreted those accounts and constructed meaning from them within the context of revising training for staff working within the educational environment, as well as educational programming.

3.3 Participant Selection and Recruitment

Upon University of Saskatchewan Ethics Board Approval (Behavioural Research Ethics # 13-108), purposeful sampling was used to recruit four postsecondary students currently enrolled in an undergraduate program at a Western Canadian university to this study. Each undergraduate student volunteered to participate in this study and each of these students self-reported that they had been diagnosed with learning, attention, emotional, and/or behaviour disorders. Reliance on self-report for this information was due to potential difficulty in acquiring documents that could confirm participants' diagnoses. Students who had been diagnosed with a learning, attention, emotional, or behaviour disorder were considered as appropriate for this study since a significant

risk factor for dropping out of school is whether a student has been diagnosed with an exceptionality. The inclusion criteria for the study participants were as follows: (1) being 18 years of age or older; (2) having been identified as showing learning, attention, emotional, and/or behavioural difficulties; and (3) willing to share his/her story of being identified/diagnosed and what his/her school experiences had been. It was not expected to recruit students with a *pure* diagnosis of a learning, attention, emotional, and/or behaviour disorders due to the high rate of comorbidity associated with these disorders (Bishop & Snowling, 2004; Visser, 2003; Kessler et al., 2006; Marker & Aylward, 2011; Visser, 2003). In addition, the concept of resilience relies heavily on individual circumstances and traits, as well as the social supports that close others may offer. Resilience must be viewed in relation to individual factors, focusing on the experiences of four undergraduate students, with the goal of deep understanding, is justified.

Initially the recruitment process invited undergraduate students at the Western Canadian University to participate in the study through an online recruitment bulletin that was posted on the university website (see Appendix A). This bulletin was visible to all students and faculty who logged onto the website. The recruitment bulletin called for any undergraduate students who met the inclusionary criteria and wished to volunteer for the study to contact the researcher. Potential participants made initial contact with the researcher who then screened the participants to ensure they met the study's inclusionary criteria. Recruitment was open to undergraduate students in all departments across all colleges because of the diversity of programming offered at the university as well as the increased likelihood of gaining access to potential participants who met the inclusionary criteria. Ten undergraduate students from a Western Canadian university replied to the online call for participation in this study. Participants who were able to provide in-depth descriptions of their educational experiences were sought-after for the purpose of the study. These six individuals (five females and one male) completed an initial interview (lasting up to 90 minutes) with the researcher, after which one of the participants could not be contacted. Another participant, while she completed an initial and follow-up interview (lasting up to 60 minutes), did not provide sufficient detailed information to be included in this qualitative study. The final sample included four adults; three of whom were Caucasian and the other of Latin-American descent. Participants ranged in age from 25 to 30 years and included three females and one male: Trina, Frida, Anna, and Jared. All participants were formally diagnosed as having learning, attention, memory, emotional and/or emotional disorders and these diagnoses were self-reported

during the interviews. Two participants, Frida and Anna, were diagnosed during their undergraduate programs, whereas Trina and Jared were diagnosed during childhood.

3.4 Data Generation

Data generation and analysis occurred simultaneously in a recursive and dynamic process. Without ongoing analysis, there is a risk of ending up with data that are unfocused, repetitive, and overwhelming in volume (Leedy & Ormrod, 2005; Merriam, 2009).

3.4.1 Interviews

Two interview sessions, an initial interview and a follow-up interview, were held with each of the six participants who met the inclusion criteria. Initial interviews were approximately 1 to 1 ½ hours in duration and held at a time and place on campus agreed upon by both parties. All interviews were digitally recorded.

At the initial interview, participants were provided with a consent form describing the purpose of the study and were reminded that their participation was voluntary, that they may ask to have the recording turned off at any time, and that they were able to withdraw from the study at any time before the transcript release form was signed (see Appendix B). The initial interviews followed a semi-structured format, with open-ended questions that focused the direction and content of the interviews (see Appendix C). The researcher's extensive consultation with literature regarding successful post-secondary students with learning, attention, emotional, and/or behavioural difficulties guided the selection of questions used in the interviews. This ensured that questions used were clear and concise and would yield useful and descriptive information from participants. The interview structure had a broad focus reflecting the complexity of the research inquiry and followed an open-ended conversational style interview format, allowing the researcher to be flexible and adaptable to the participants' responses. Further, the researcher was able to spontaneously react to the participants' responses, and use probing questions to supplement the open-ended questions that make up the majority of the interview (Ray, 2009; Van Den Hoonard, 2012). Further probing questions were important to help gather more details and provide clarity to the participants' experiences. Compared to choosing a generic response common in questionnaires, this interview technique allowed for a range of answers from participants who could reflect on their personal experiences.

One follow-up interview lasting up to 60 minutes was conducted with each of the four participants at mutually agreed upon times and locations on campus after responses from the first

interviews were transcribed and examined in order to inform the follow-up interview guides. Each semi-structured interview was digitally recorded and then transcribed by the researcher. The participants were given the opportunity to review the transcript for accuracy, as a form of member-check (Gall et al., 2010). Participants could add, change, or delete portions of the transcript they were not comfortable with releasing. Participants signed a transcript release form once they had reviewed and approved their final transcript (See Appendix D). Considerable effort was made to protect the identity of the participants. Each participant was assigned a pseudonym and all personally identifying information was cleared from the final manuscript.

3.5 Data Analysis

Data analysis is described as "the process of making sense of the data," whereby the researcher consolidates, reduces, and interprets their data in an effort to create meaning from the data (Merriam, 2009, p. 175). Data produced from the interview transcripts were analyzed using a basic interpretive qualitative approach (Merriam, 2009). This method of analysis is appropriate for this study because research that is rooted in constructivism is dependent upon interpretation, and therefore naturally fits within the interpretive analysis approach (Merriam, 2009). Further, the data was viewed and interpreted within the resiliency conceptual framework outlined earlier. Data were analyzed and interpreted in order to inductively identify recurring patterns or themes across the data set (Merriam, 2002).

Braun and Clarke (2006) suggested a six phase process for analyzing qualitative data, wherein analysis involves constant movement backward and forward throughout the phases in a recursive process. The first phase of data analysis is *familiarizing yourself with the data*, in which transcription, reading and re-reading, and noting initial ideas about the data takes place (Braun & Clarke, 2006). After data was transcribed and the researcher was familiar with the data, the next phase, *generating initial codes*, began. During this phase, the researcher coded interesting features of the data, moving through the entire data set. Next, the researcher began *searching for themes*, which involved grouping the codes into potential themes. The theoretical framework of resiliency was used as a frame to assist in the identification of themes related to students' experiences of success despite barriers they have faced (Masten et al., 2009). After themes were determined, the researcher *reviewed the themes* to examine whether the themes were consistent with the initial codes generated by the researcher and the entire data set. *Defining and naming themes* was the fifth phase of analysis and involved determining the essence of what each theme

was about. Lastly, the researcher engaged in *producing the report*, which included using the set of themes to create the final analysis of the report. Compelling extracts of data were collected from each theme to be included in the final report. This data analysis process created very rich and detailed descriptions, viewed within the conceptual framework of resiliency. Specifically, it was appropriate because the purpose of this study was to add to the understanding of the school experiences of undergraduate students and how those experiences relate to their decision to stay in school. This final report also includes excerpts from the data that were gathered throughout the interview process.

3.6 Trustworthiness

The standard for rigor in conducting qualitative research is often referred to as *trustworthiness*, and is considered the extent to which the reader can trust that the results and interpretations are grounded in the data (Merriam, 2009). The components of trustworthiness include credibility, transferability, dependability, and confirmability.

3.6.1 Credibility

In this study, a number of things were done to establish credibility, which refers to how the research findings (i.e., interpretations) match reality (Merriam, 2009). In attempting to achieve credibility (and depth), multiple data sources were used to triangulate findings (Merriam, 2009). First, multiple individuals participated in the study, meaning that data from multiple sources was gathered. Secondly, the length of the interviews as well as time between initial and follow-up interviews served as an opportunity for participants to be relieved of some anxiety they may have felt as a result of speaking about their experiences and any sensitive subject matter. This time frame for interviews was designed not only to gather information- and detail-rich data, but to add to the credibility of the study in that participants may have felt more comfortable about sharing their experiences honestly. Further, data was compared and cross-checked with relevant literature at different times, as well as with follow-up interviews with the participants. Peer debriefing with my thesis supervisor and member-checks were also conducted. The member-checking process involves sharing initial impressions with the participants and obtaining feedback regarding the accuracy of the researcher's understanding of the data (Snyder, 2002). Further, this process is "the direct test of findings and interpretations with the human sources from which they have come" (Lincoln & Guba, 1985, p. 301).

3.6.2 Transferability

A detailed and thick description of the context of the study was provided in an effort to allow the reader to judge whether the study is applicable to similar situations or transferability (Conrad & Serlin, 2011; Lincoln & Guba, 1985). Indeed it is the reader who establishes transferability of a qualitative study based on the descriptions provided (Merriam, 2009). This included a wide range of relevant information about and direct quotes from participants in the study.

3.6.3 Dependability

Dependability involves “accommodating changes in the environment studied and in the research design itself” (Conrad & Serlin, 1994, p. 416) such that the findings of the study are consistent with the data presented (Merriam, 2009). In order to achieve dependability in this study, the researcher kept a research journal and audit trail to aid in and document decision-making regarding data analysis. Interview logs, audio-recordings, and transcripts, and researcher comments and memos were contained in a researcher journal. The purpose of this journal was to aid in the process of simultaneously collecting and analyzing the data. The audit trail was utilized to help to keep the data from the study organized so that specific data or researcher comments could be located during intensive analysis (Merriam, 2009; Yin, 2003). Further, member-checks and peer debriefing, as well as the use of the basic interpretive data analysis method, also helped to ground the findings in data, as this method is reflexive and involves multiple steps in determining themes (Braun & Clarke, 2006).

3.6.4 Confirmability

Confirmability in qualitative research refers to the neutrality and accuracy of the data (Tobin & Begley, 2004). The confirmability of this study was ensured by the use of an audit trail to engage in data analysis simultaneously with data collection. In following the steps for Braun and Clarke`s (2006) thematic analysis and documenting this process through an audit trail, it was confirmed that participants in this study shared experiences from which themes could be developed. Further, a researcher journal was utilized to record the rationale for decisions made throughout the research process, how the researcher reflexively engaged with the literature during data collection and analysis, as well as instincts the researcher experienced during research (Houghton, Casey, Shaw, & Murphy, 2013).

3.7 Ethical Considerations

Ethics approval was sought from the University of Saskatchewan Ethics Board and no unique ethical concerns were noted. Participation in the study was voluntary and the participants had the right to withdraw from the study at any time. Informed consent was granted from each participant before proceeding with any data collection. All participants were required to sign a consent form detailing the purpose and significance of the study, as well as information pertaining to the participants' rights. Participants were informed of their right to withdraw from the study at any time, as well as how their data will be kept confidential. Participants were also provided with the researcher's contact information as well as information regarding how they may obtain a final report of the study results. In addition to signing a consent form prior to data collection, each participant was verbally reminded of their rights before each interview began. Digital recordings of the interviews were only available to the researcher. Data from this study will be properly stored for the required five years in the office of the researcher's supervisor Dr. Laureen McIntyre, in the Department of Educational Psychology and Special Education in agreement with the University of Saskatchewan regulations. No identifying information was used in the study; instead each participant was given a pseudonym.

In the following chapter, the demographics of the participants are discussed and the themes are presented.

CHAPTER 4: RESULTS

This chapter introduces the four participants who contributed to this study and outlines their beliefs and experiences related to how they have overcome obstacles in their life to achieve academic success and stay in school. Pseudonyms were chosen in order to protect participants' confidentiality. Participants' quotations were often edited to increase readability and protect confidentiality. For example, specific names were changed or deleted and repetitive and unnecessary language (e.g., like, yeah, you know) were eliminated.

4.1 Participants

Ten undergraduate students from a Western Canadian university replied to the online call for participation in this study. Participants who were able to provide in-depth descriptions of their educational experiences were sought-after for the purpose of the study. These individuals (five females and one male) completed an initial interview with the researcher, after which one of the participants could not be contacted. Another participant, while she completed an initial and follow-up interview, did not provide detailed information enough to include for data analysis in this qualitative study. The final sample included four adults; three of whom were Caucasian and the other of Latin-American descent. Participants ranged in age from 25 to 30 years and included three females and one male: Trina, Frida, Anna, and Jared. All participants were formally diagnosed as having learning, attention, memory, emotional and/or emotional disorders and these diagnoses were self-reported during the interviews. Two participants, Frida and Anna, were diagnosed during their undergraduate programs, whereas Trina and Jared were diagnosed during childhood.

The first participant interviewed was Frida, a 27 year-old undergraduate student who at the time of her interviews, was in her third year of a professional university program. She enrolled in university immediately after graduating high school and dropped out during the first year of her program. Frida then received diagnoses of Generalized Anxiety Disorder (GAD), Agoraphobia, and Depression, although she reported that in retrospect, signs of these disorders were present throughout her childhood. She received therapeutic services for two years before re-enrolling in a different university program. Frida reported that the new program was not a good fit for her due to the program's content and its relation to her personal life, and she chose to discontinue her university education for a second time. She then worked for a period before enrolling in a post-secondary program at a technical college and finding employment within a

trade. Frida realized that she did not want to build a long-term career in that field and decided to re-enroll in university to begin the professional program in which she is currently enrolled. She registered with the university student support center whose staff suggested that she see her doctor for a possible diagnosis of Attention Deficit Disorder (ADD). After seeing a specialist, Frida was diagnosed with ADD, although she admitted that she does not feel this diagnosis is correct and does not seek treatment for it.

The second participant interviewed was Anna. At the time of the interviews, Anna was a 25 year-old undergraduate student in her fifth year of a competitive program in the health sciences. She first completed a certificate for a part-time health services program at a technical college immediately after high school, and then began her university education while continuing to work in the health services field. She was diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) at the end of her second year in university when she dropped a number of classes due to academic difficulties for which she found she could no longer compensate (i.e., having to work longer and harder than peers for slightly better than average grades, not being able to demonstrate her knowledge). She reported that she “crashed and burned” at the end of her second year in university and spent that summer in a deep depression while working out medication issues. She also self-identified as having dyslexia, but these difficulties have not been formally diagnosed. Anna was able to return to her university program for her third year and was preparing to graduate from university shortly after she was interviewed.

The third participant interviewed was Jared, a 30 year-old undergraduate student in his second year of a competitive professional university program at the time of his interviews. Jared was diagnosed with dyslexia when he was in first grade after his parents sought out an explanation for his learning difficulties. While he reported that he has learning difficulties, he also indicated he has been academically successful. After completing high school, Jared enrolled in and completed a trade program at a technical college while working part-time in a lucrative but unrelated field. He continued to work in this position for a number of years following the completion of his trade program until he was offered a position in that trade. Jared reported that he didn’t find working in this field interesting or challenging enough, researched other options, and decided to enroll in a diploma program at a community college. After earning his diploma, Jared found that he would be able to make more money and do more interesting work in his field with a university degree, which motivated him to enroll in university.

Trina was the final participant to be interviewed. At the time of the interviews, Trina was a 30 year-old undergraduate student who was in her fourth year of a science program. Trina reported being diagnosed with ADD at ten years of age, and was taking medication periodically to treat her symptoms until partway through her Grade 12 year. Following high school, Trina recalled relocating a number of times for employment and post-secondary education. She completed a program at a technical college and enrolled in university shortly after, but described dropping out and “walking away from it very unceremoniously.” Trina has worked multiple jobs and enjoyed working, but decided that these positions were not long-term options for her because of her financial goals. She was enrolled at another university before dropping out and relocating for her current undergraduate program. Trina reported that during her third year of this program a conversation with a friend reminded her of her ADD diagnosis. She then researched her diagnosis and was re-evaluated for ADD, which resulted in confirmation of her diagnosis in childhood. She reported that despite having difficulties throughout her university experiences, she has found employment in her field and will be finishing her degree while she continues to work.

Participants demonstrated characteristics of resiliency when they were interviewed by the researcher to explore how they have overcome obstacles in their life to achieve academic success and stay in school. Three major themes were identified as participants’ stories were reviewed: (1) Unpacking the “Box”: Exploring perceived attitudes about diversity in the learning needs of students; (2) Breaking the “Box”: Redefining success by adapting behaviour in the context of post-secondary education; and (3) Reshaping the “Box”: Overcoming personal barriers and achieving success. These themes are ordered numerically for organizational purposes and this numbering does not indicate rank or level of importance, and are discussed and linked together using meaningful quotes from the participants.

4.2 Themes

Interviews with participants in the current study produced 201 pages (i.e., 59,688 words) of transcripts containing data from which themes were developed. The total number of segments of data contained within the three themes is 216. Excerpts chosen by the researcher to be included in this section were considered to be the most information-rich and illustrative of the concepts captured within each theme.

4.2.1 Theme 1: Unpacking the “Box”: Exploring Perceived Attitudes about Diversity in the Learning Needs of Students

This theme included 97 segments of data from interview transcripts. Segments of data were distributed across five subthemes: (1) reactions of denial and acceptance (19 segments); (2) accommodations (9 segments); (3) supports that are missing (27 segments); (4) social support (20 segments); and (5) learning style matches and mismatches in education (22 segments).

Trina, Frida, Anna, and Jared experienced mixed reactions from instructors/professors and other school staff (i.e., school administration, counsellors, disability service providers, academic advisors, teaching assistants) across their educational experiences. For example, Jared reported multiple negative reactions to his diagnosis:

There’s a heavy stigma that goes with it. There’s a heavy stigma. I’ve had multiple instructors, at a post-secondary level and at a public school level approach me as if it’s bologna, like it doesn’t exist. You know, it’s, “Oh no, that’s not real.” So it can be quite disheartening. I’ve been viewed as very stupid. I remember I had a teacher tell me that there’s no way I could’ve written that because I’m not smart enough, so I must have plagiarized it.

And when speaking about the academic accommodations Anna receives, she explained that she has experienced mixed reactions:

They weren’t always welcomed by professors. Some professors are great. Other professors – it’s frustrating to see how much my disabilities seemingly negatively affect them, but I’ve had professors have different views of me, which is very limiting.

Anna and Jared exemplify a motivation to succeed despite challenges they face, an individual protective factor associated with resilience. While Frida hasn’t always had positive reactions in her academic endeavours, she explained that instructors in her current program appear accepting:

They’re like, “Oh, yeah. You’re registered with [student support services center]. So I’ve had a really good time with all of my profs in this program.

In seeking out academic support in university, Trina has experienced some frustration:

I kind of tried to go that route a couple of times, but inevitably it’s kind of gotten derailed by one thing or another. I remember there was one time sort of early on and I don’t remember exactly all the lead-up to it, but I know that the sort of key points were that I had made this appointment and it was a couple of months down the road or something like

that and I had again asked them if they could remind me. And I don't remember necessarily whether I got a reminder or not, but anyway, I missed this appointment and just kind of remember getting this scathing email. . . kind of shaming me for missing this appointment and I sort of said, "Well, check my file..." I don't like to use it as an excuse, but at the same time, when you're dealing with people who have time management problems and that's a big part of ADD, you should be willing to make some concessions and not shame them.

Trina explained that her attempts to access student support services for academic help involved a lot of run-around and eventually got derailed due to her busy schedule. This made her decide to continue her education without their support:

I felt a lot of times like there was sort of a bit of run-around to do and I understand that they've gotta cross their t's and dot their i's and get all the paperwork in, but it just seemed like a lot of steps. Then I got busy with other things and that sort of gets put on the back-burner and all of the sudden a month has passed and it's kind of too late to continue with that so you have to start again. I tried, especially after I got re-diagnosed, 'cause I thought some of this stuff might be nice – more time on exams – and that would be okay. But after trying a couple of times and also feeling like, "Well, I've come this far without it. It may be beneficial, but I also feel like I can proceed without these concessions too."

Jared, Frida, and Anna reported that they utilized services available from their institution's student support services center, demonstrating their problem-solving skills, an individual variable related to protective factors in the study of resilience. Further, the availability of such services at their post-secondary institution may also foster these participants' characteristics of resilience, as education systems are considered a common adaptation system (Masten, 2014; Masten & Powell, 2003). For example, Anna reported that the accommodations she receives are beneficial for her academic standing:

Between medication and my accommodations through [student support services], I've had an average increase from being low- to mid-sixties up to an over seventy average. I wouldn't be able to be anywhere near a seventy average if I didn't have those accommodations.

Jared also explained the benefits of his accommodations:

The “more time” is good – it’s hands-down good because when you’re writing an exam, for myself, it takes me a longer to read questions and to write things out, especially if it’s an essay-style question or anything like that. I take a heck of a lot longer than most people. So definitely, I wouldn’t be able to do it without more time. I wouldn’t.

Jared, Anna, Frida, and Trina all discussed the benefits of having strong social support systems. While each participant’s experiences and levels of encouragement differed, participants reported that others in their lives have helped to promote their academic success. For example, Frida spoke about how her family and friends have supported her:

Family is huge. I’ll get stranded sometimes, like I’ll just freeze up. I don’t anymore but it’s happened three times and it’s horrible. My sister would – one time she drove from another city to come get me. Just knowing that they were there. . . My parents got divorced a few years ago, but my dad stayed just until I got better and *super* appreciated that ‘cause I would have been – we would have had to move which is crazy ‘cause I couldn’t leave my room. They’ve all been amazing. And my friends too; I haven’t lost any friends, which is crazy ‘cause I didn’t leave my room for a good year. Once I started getting better, I could talk on the phone again and was like, “I’m crazy. I can’t explain it,” and they were just like, “Okay.” I feel like it’s in the delivery [laughing].

And Jared reported that having university-educated friends and family benefited him:

My parents are fantastic and they’ve both been through university so they know how it all goes . . . I have a lot of family who have gone through the university system.

Trina explained that the support her dad provides her is very helpful:

He always just says, “You know, do your best.” I’m gonna get all choked up about it because I love my dad. . . I think that has been helpful and I feel like he kinda gets it and knows where I’m coming from ‘cause he did the same thing and he’s got. . . dyslexia and probably ADD worse than I do. . . he’s really been a good support and good sort of mentor that way too I guess.

And Anna spoke about the value of her fiancée’s reaction to the difficulties she experienced at the end of her second year of university:

At that time I didn’t have a very close relationship with very many people. I was very much introverted and. . . the social anxiety at that time was a lot so I didn’t have very much for peers, but [my] fiancée – he did amazing. I couldn’t have asked for better from

him. He couldn't understand what was going on and he couldn't necessarily help me through it, but he was very supportive in understanding how critical it was to not push me to do the dishes or change out of my pajamas or take a shower [chuckle], so he was supportive the best he knew how to be.

All four of the participants each acknowledged their family and/or social networks as helping them to achieve academic success. The participants' use of the resources gained from these common adaptation systems (family and social networks) shows that they demonstrate resilience in the face of hardship (Masten, 2014; Masten & Powell, 2003).

Participants also spoke about how their learning styles have been either matched or mismatched throughout their academic experiences. Interestingly, some of the descriptions provided by participants contrast with one another, which highlights the individuality in learning styles across students. For example, Anna explained that the way content is presented in her courses does not match how she learns best:

I work in the complete opposite manner. When I have a big concept or theory I'm interested in, it's because it's beyond my grasp so I would need the opportunity to look at it and say, "Well what to do I need to understand in order to understand this big concept?" This is on a ladder from one to one-hundred and most students in the current system start at one and go to a hundred; I would start at a hundred and say, "What's step #99? Do I understand that?"

Jared also expressed that the way he learns is often not reflected in his courses:

I often dislike the sequence of which profs will teach things. Today I was in a class and the prof puts on the board an equation and then he's stepping back and, "Oh yeah, I guess we need to go find this. Oh I guess we should define this variable," – all things that, logically for me, I would've done first. It seems like they're all over the place order-wise. I would get my ducks in a row before I try to solve it and most profs will start diving in and, "Oh, wait a minute. We need to back up. We don't have this. Let's do this little piece," and then we'll go further and, "Oh, wait. We need this too," and that stuff is all – you can see that by looking at the question you need those components first. And so I find it very frustrating and distracting and it ruins the flow for me.

Frida explained that as she progresses through her degree, she is finding that her learning style is consistent with how she is being taught:

Discussion-based and hands-on is huge to me. I do like working in groups. If it's a collaborative thing, I find it more interesting because 'cause then there's an added layer of working with people. I feel like that's it; having it be applicable to real life.

And Trina explained that while she understands that not everything can be individualized, she struggles with getting her work done in a certain format:

I know they have to try and cater to everyone in the class, which makes sense, but I've had assignments where it's like, "Read this article and then write a quick little blurb about your opinion on it," and it sounds like nothing right? And I would always read the articles because I really like to read, but then for some reason writing what should be just a quick little blurb turned into a big deal because I felt like I wanted to say the right thing and then I'm editing it for a long time. I just sort of get sucked into it. It's either I'm really engaged or not at all. I would much rather sit in class and have a conversation.

Although Frida reported that her learning style is now more congruent with the teaching approach her instructors take in her current program, this was not always the case in her post-secondary experience. Anna, Trina, Jared, and Frida all explained that they had experienced mismatches between their learning styles and the teaching approaches they encountered. However, these participants demonstrated characteristics of resilience by adapting to their environment in order to remain successful, specifically intelligence and motivation to succeed, as well as utilizing problem-solving skills.

While discussing how their learning styles are considered in content delivery, Trina, Frida, Jared, and Anna all provided recommendations for additional support. By providing these recommendations, each participant demonstrates characteristics of resilience through the intelligence and critical problem-solving skills revealed through their descriptions. These suggestions included general recommendations that may benefit all students and not just students who have been diagnosed with learning and/or health difficulties. For example, Trina spoke about having lectures captured on video, although not available for all of her classes, was beneficial for her learning:

Some of them had video capture and that was so helpful because even if I was late to class or couldn't make it, it was just so great for me to be able to have that. I'd put it on when I was studying or put it on while I was doing other things too and then just have that consistent reminder of the material that we covered I felt like that was so helpful. Plus it's

the audio and visual aspect of it and you can slow it down and rewind it – because sometimes in class I would be taking detailed notes and then be so into my notes that I’d miss what’s being said. So having that format where I can just stop and rewind it and go back or listen to it while I’m driving, that was really, really helpful.

Frida explained that she finds it difficult to demonstrate her knowledge sometimes:

If I could talk an essay out, I feel like that's a better way to demonstrate what I know than to write, but I know writing is super important. It's a thing that I have to work at constantly.

Other recommendations were based on learning styles and accommodations. While discussing what would be his ideal educational setting, Jared explained:

Nobody has ever said to me, “What do you need?” Nobody’s ever said that to me in all the years I’ve done education, “What do you need?” It’s always, “This is what we can do; this little list. That’s it.” Cut and dry. “You better fit in that box, ‘cause that’s all we’ve got.

Anna made a similar point when talking about how she has experienced seeking support regarding her ADHD diagnosis:

So you tell somebody you have a learning disability and they jump to this whole host of conclusions and ways in which they feel you need help – i.e., my grass isn’t quite as green as they feel it should be and this is how they would water it – and never getting the opportunity to identify which of their resources – (1) identify what they have for resources and (2) identifying how I could use those for myself.

In summary, Frida, Anna, Trina, and Jared each described reactions of acceptance and/or denial regarding their difficulties or diagnoses and indicated that these reactions from others can affect their school experiences. All participants reported that support from friends and family as well as academic accommodations are beneficial for their academic success. Learning style matches and mismatches were described based on participants’ perceptions of how they learn best. Trina, Frida, Jared, and Anna all explained that there are additional supports that students with and without diverse learning needs could benefit from, but do not necessarily have access to at this post-secondary institution. The descriptions provided by Anna, Frida, Jared, and Trina show some specific characteristics of resilience that they demonstrate including: problem-solving skills; intelligence; mastery motivation and motivation to succeed; and community variables such

as accessing accommodations available through their post-secondary institution. Based on participants' school experiences, the following theme relates to defining academic success through adapting behaviour and continued development of self-concept.

4.3.2 Theme 2: Breaking the “Box”: Redefining Success by Adapting Behaviour in the Context of Post-Secondary Education

This theme included 72 segments of data from interview transcripts. Segments of data were distributed across three subthemes: (1) adapting to the environment and self-directed strategies (29 segments); (2) priorities and sacrifices (11 segments); and (3) redefining academic success (32 segments).

Frida, Anna, Jared, and Trina all spoke about how they have changed their own behaviour to make post-secondary education a successful endeavor. For example, Jared spoke about the strategies he uses on a daily basis to remain competitive in his program:

I write my own notes that are pertinent to me and then I go home; I look at the notes that are given by the note-taker, print those off, and compile them together. I often will rewrite my notes. I will study; I'll teach it to myself. My average is easily over six to eight hours of homework, and that's the average unfortunately, and that's what it takes for me.

Trina explained that she finds it helpful to incorporate the material she learns in her courses outside of the classroom:

I've got one friend who just totally loves chemistry and is a big math nerd and that's awesome. It's just nice to even go and hang out with her because she kind of knows what I'm talking about. It's really sort of refreshing and I feel like that really kind of helped me to stay on track 'cause if I can have a bit of fun while doing it, it really helps. And to be able to talk about the things that we're learning out of the context of the class, in the context of real-world kind of – like talking about chemistry and then, “Oh! I wonder what would happen if we mixed “whatever” in the kitchen!” [laughing] I feel like that really helps me when I can take that information that is kind of sterilized in the school environment and kind of take it out to play [laughing] and get it dirty and mess around with it and kind of see the real-world applications of it. I feel like that is really helpful for me.

Frida spoke about how she implements self-talk strategies learned in therapy on a daily basis:

So now when I start questioning the entire educational system, I can be like, "Okay, it's okay. It's just anxiety. Just... do your essay," you know?

Anna spoke about some of the self-reflection she's done in relation to her education, particularly surrounding the time of her diagnosis:

Most of it was self-reflection and allowing myself enough time to sit in turmoil to kinda clear my head of judgment and all the stigma that I felt was kinda put upon me externally as well as internally, the last two years at that point.

She further explained that this self-reflection serves as an important strategy for her in developing her sense of self:

Although it's been viewed as a struggle, it's been setting myself up for a very bright future – very positive future – because I've never been willing to accept that that's all that I am. I recognize that I'm not lacking intelligence. . . I know I understand things; I just can't prove it.

Participants' reports of how they adapt their behaviour to their environment in order to be academically successful is indicative of a number of characteristics of resilience, including: mastery motivation and motivation to succeed; self-regulation; intelligence; and problem-solving skills (Masten 2014; Masten et al., 2009; Masten & Powell, 2003).

These characteristics are also evident in participants' descriptions of self-reflection. Anna, Frida, and Trina spoke about some of the realizations they've made throughout their post-secondary education. Frida noted making trade-offs regarding school are necessary in her life to finding a school-life balance:

I don't like being told what to do, so I'm super stubborn and I just always felt like – Well, coming from high school, I felt like that was a giant waste of time and then when I got to university, I just didn't like that it was – I felt that it was made to be the most important thing. It was like I was supposed to prioritize it above everything and I just am not like that and so I – it just felt like I disagreed with a lot of my profs or, you know, they were like, "Oh you could've done better on this," and I'm like, "Yeah, but if I didn't sleep or didn't see family or..." So I feel like that's my biggest problem with it . . . It's just the whole thing I find so overwhelming; just how important it's made out to be and how competitive and how it'll affect the rest of your life sort of thing. I just don't get – I don't buy it.

Trina also spoke about putting in a lot of effort to conform to others' expectations and what that trade-off looks like for her:

I'm at a point now where I don't feel like I have to guilt myself and freak out about it and get upset about it, whereas when I was younger I just would've had – I don't know. I don't want to say higher expectations, but unrealistic expectations of myself. I feel like I've kind of come to a point now where I'm like, "Okay, this is sort of just the way it is and, you know, just do your best," and not hold myself to everybody else's standards all the time.

During Anna's interviews, she spoke about redefining success for herself in relation to her diagnosis and post-secondary experiences:

When I'm chronically told that I'm not good enough or I'm not smart enough or I don't have good enough grades; here's X, Y, and Z that I need to do in order to make my those areas of my life better – don't be lazy; study harder; so on and so forth – that doesn't help me. I don't get better and it's certainly not from lack of effort. However, when I'm put into a setting in which I'm there because I enjoy being there and I'm there because I get to focus on what I do right or what I do well and I'm given the room to do that better, I excel in ways that amaze even myself. So given the opportunity to focus on what's right with people and enhancing what's right with people, I think people [would] be a lot happier and it would be a lot more productive place rather than focusing on what we think is wrong with people and challenging other people to reach the expectations of our own perceptions of them rather than enhancing their perceptions of themselves.

In summary, Jared, Anna, Frida, and Trina all expressed that they use their own self-directed strategies to compliment academic accommodations in order to achieve their conceptualizations of success. These self-directed strategies included additional academic efforts, self-reflection, and finding a school-life balance. For Anna, Trina, and Frida, these strategies have helped to shape and redefine their conceptualizations of success within and outside of academia. Based on participants' descriptions of their experiences, they demonstrate a number of characteristics related to resilience, including: intelligence; problem-solving skills; self-regulation; and mastery motivation and motivation to succeed. The final theme relates to all four participants' decision to continue their education, based on how their feelings about school have changed throughout their post-secondary experiences.

4.4.3 Theme 3: Reshaping the “Box”: Overcoming Personal Barriers and Achieving Success

This theme included 47 segments of data from interview transcripts. Segments of data were related to participants’ decision to stay in school as well as participants’ suggestions for how their institution can improve and continue to support students with diverse needs.

Frida, Anna, Jared, and Trina all spoke freely about how their post-secondary education experiences have shaped their feelings toward school. For example, Frida described how she has been successful on her own terms by incorporating aspects of university that do not deal with academics directly:

I guess when I leave school, I’ll have gotten more than just a degree by joining these groups [organized clubs] and that’s worth it because like I said, people and interpersonal relationships; that’s what I love. So it’s like if I get that from school as well as a degree, it’s worth it [laughing] – just the degree might not be worth it. And the way, if I’m stressed about school – if I put off an essay because I was [at a group], it’s okay. It’s not just stress because I procrastinated, it’s stress because I traded it for something that I really, really value.

Frida’s belief that her life has meaning is a characteristic associated with resilience, as well as her motivation to succeed in other areas of her life not related to academics. Despite the barriers that Anna has faced in her university experiences (e.g., being denied research experiences based on her academic standing, needing to spend more time on academic work than her peers in order to achieve average grades, learning in a different way than how material is presented in her classes), she explained that self-reflection has helped her to overcome those barriers:

I think that I’m really grateful for how awful my university experience has been because it’s really challenged me to better myself and to have not done that, I wouldn’t want to imagine the turmoil in which I would be.

Jared described how his feelings toward school have not changed, but based on his experiences he is aware of the root of the issues and the barriers students with diverse needs typically face:

Sadly, I can’t say that has in the last many years affected my feelings toward school because I know that’s how it is. I’d love to say that I’m surprised or shocked and I’m not. Talking to people, friends of mine who are teachers, who come into the school system . . . there is no training or very, very sparse training, so they’re unaware; they’re uneducated. The ones who you can tell are actually decent and good at what they do will

look into it or have looked into it in the past or are well-versed on it. Then you get the other people who think you're just trying to screw the system somehow or get something you don't deserve and it's an unfortunate reality of a lack of education.

In speaking about experiences related to dropping out of or continuing university, Trina expressed that her commitment to her education needed to be self-initiated and that this affected her decision to re-enroll in university:

I do think that I'm definitely more able to cope or that I maybe have come up with coping strategies in the time in between school sort of. I feel like if I were to have attempted this when I was the age of a lot of these other people, I don't feel – and I mean, that's probably why I dropped out the first time, you know? 'Cause I don't feel like I was devoted enough to do it or I feel like when I came back this time I really came back with a sense of, "I want to do this," and this is really something that I wanna do for myself and not because I feel like I should or not because you know, nobody's pressuring me into it.

Jared and Anna both explained that they have never considered dropping out of school. For example, Anna described how she conceptualizes failure in her life, academic and not:

It's never occurred to me to drop out because I don't fail. And when I do fail, I don't consider it a failure; I consider it learning. So I very much recognize that everything is just a step along the way and something better is on the other side of that step.

For Trina, Jared, and Anna, the determination and commitment they described regarding academic success is reflective of their motivation to succeed, an individual variable that may be considered a protective factor (Masten, 2014; Masten et al., 2009).

Frida explained how each of her post-secondary experiences helped her gain confidence and develop a sense of belonging in academia:

Without that [trades experience], I don't think I would have come back to university 'cause that's the first time that school was fun and there was a sense of community 'cause our class was so small...and that's what [current academic program] feels like now, 'cause I don't think it's a very big program.

She went on to explain what could have prevented her from dropping out of university:

I don't know if it's just the upper level classes or if it's just my program, but the fact that it's less formal now – I had that one class – the discussion-based one and. . . and the other where we just mostly did debates – the fact that it's not 400 kids in a room

anymore is super helpful. I guess if there was some way to do that earlier on, I may not have dropped out; if I could have had classes that the whole way through my degree, I probably would have had an easier time.

Demonstrating problem-solving skills, Jared proposed that more education and training surrounding working with students with diverse learning needs is needed for educational staff and administrators:

[T]here should be some push in the educational world for people with many different types of learning disabilities because there [are] people out there who can definitely succeed that *will* just fall through the cracks. And I've seen people slip away and fall through the cracks that I know have learning disabilities and just didn't get the support they needed or maybe just didn't have the backbone to fight back or advocate or step up. They don't make it easy for you, I'll tell you that.

And Anna suggested reshaping the way students are supported in university so that success is individually defined:

I think there should be more of a dialogue instead of telling people what they need in order to excel. We should validate how they feel it is they should excel and then we should ask them what it is they need to be able to do that instead of forcing a particular idea of success and then forcing upon them the technologies or the assistive programs to make them better at what they suck at.

In summary, participants' educational experiences helped to shape their feelings toward, and be successful within, post-secondary education. Based on participants' descriptions of their experiences, they demonstrate a number of characteristics related to resilience, including: mastery motivation and motivation to succeed; problem-solving skills; the belief that life has meaning; and a sense of community. Frida explained that her involvement in non-academic areas of university allowed her to find more value in her post-secondary experience. While Anna was grateful for her negative school experiences because they allowed her to self-reflect and overcome barriers to academic success by conceptualizing failures as learning opportunities. Jared reflected he has not changed his feelings about school as he has continued his education, and shared that he feels his instructors/professors have lacked education about and awareness of his learning needs. Trina explained that her motivation for completing post-secondary education changed based on her experiences, and that this intrinsic motivation is what helped her in

achieving success. Participants also made recommendations on how post-secondary institutions might better support students with diverse learning needs. For example, Frida reported the sense of belonging she felt in a smaller program with fewer students and less formal teaching methods is what helped her to continue her education. Jared suggested instructors/professors and support personnel (i.e., teaching or administrative assistants, etc.) should have more professional development related to, and awareness of, diverse learning needs in order to better support post-secondary students experiencing difficulties. Finally, Anna proposed reshaping the way support is provided to various students by considering students' conceptualizations of success thereby allowing for more individualized support.

4.3 Summary

The experiences described in this chapter reveal some of Frida, Anna, Jared, and Trina's post-secondary education experiences, difficulties they have encountered due to their diverse learning needs, how they were able to achieve success despite these difficulties, and how their experiences can inform additional support for other students with diverse learning needs. Three themes were identified in participants' interviews. The first theme focused on participants' perceived attitudes about diversity in the learning needs of students. Frida, Anna, Jared, and Trina described reactions of acceptance and/or denial regarding their difficulties or diagnoses and indicated that these reactions from others affected their school experiences. All participants reported that support from friends and family, as well as academic accommodations, were beneficial for their academic success. Learning style matches and discrepancies were described based on participants' perceptions of how they learn best. Trina, Frida, Jared, and Anna all explained that there are additional supports that students with and without diverse learning needs could benefit from, but are not necessarily able to access. The second theme focused on participants redefining success and adapting their behaviour in the context of post-secondary education. Frida, Anna, Jared, and Trina all expressed that they used their own self-directed strategies to complement academic accommodations in order to achieve their conceptualizations of success. These self-directed strategies included additional academic efforts, self-reflection, and finding a school-life balance. For Anna, Trina, and Frida these strategies have helped to shape and redefine their conceptualizations of success within and outside of academia. The third theme focused on overcoming the barriers participants faced in their post-secondary experiences and achieving success despite their difficulties. For Frida, her involvement in non-academic areas of

university helped to make her post-secondary experiences more valuable to her. Anna was grateful for her negative experiences because they allowed her to self-reflect and overcome barriers to academic success by conceptualizing failures as learning opportunities. Although Jared's feelings about school did not change, he reflected on the lack of education and awareness he has experienced in others' reactions to his learning needs. Trina attributed her current success to a shift toward intrinsic motivation to achieve academic success. Participants also made recommendations on how post-secondary institutions might better support students with diverse learning needs. For example, Frida explained that the sense of belonging she felt in a smaller program with less formal teaching methods has helped her to continue her education, while Jared suggested more education and awareness for instructors/professors and support personnel (i.e., teaching or administrative assistants, etc.). Finally, Anna proposed more individualized support for students by considering students' conceptualizations of success. In this theme, participants' descriptions demonstrated variables associated with resilience such as: mastery motivation and motivation to succeed; problem-solving skills; the belief that life has meaning; and a sense of community. Despite these participants' difficulties and the negative educational experiences they have encountered, each of them have achieved success in post-secondary education and therefore demonstrated a pattern of resilience in the face of adversity.

The final chapter discusses participants' educational experiences related to their academic success (i.e., continued education) in connection with existing research, the practical implications of these findings, limitations and strengths of this study, and areas for future research.

CHAPTER 5: DISCUSSION

This study explored the school experiences of post-secondary students with diverse learning needs in order to gain a better understanding of how they made the decision to continue their education and work to achieve academic success. This study also focused on resiliency and what factors the participants identified as helping them achieve academic success, defined as continuing their post-secondary training. This chapter reviews the main findings of this study related to the educational experiences of post-secondary students with diverse learning needs and discusses how these findings relate to current research literature and resiliency theory. Implications for educators, administrators, and all personnel working with similar populations of students are discussed, as well as the strengths and limitations of this study and areas for future research.

5.1 Summary of Findings

Although the participants in this study identified as having different areas of academic difficulty and diagnoses (i.e., dyslexia, ADHD-hyperactive subtype, ADHD-inattentive subtype, and GAD with accompanying depression and agoraphobia), they all faced similar challenges in the post-secondary education setting. While initially the researcher was seeking to explore the positive factors in these participants' lives regarding their experiences and decision to stay in school, negative or challenging factors identified within participants' accounts were equally important to the research questions and were therefore included in data analysis. The purpose of this study was to describe and facilitate further understanding of the school experiences of university students with diverse learning needs, with the hope of coming to a greater understanding of how academic success is achieved among these individuals. The research questions that guided this inquiry were:

1. What are the school experiences of undergraduate students with learning, attention, emotional, or behaviour disorders? and
2. What school-related factors contribute to these students' decision to stay in school?

Frida, Anna, Jared, and Trina all shared that they have: encountered various attitudes regarding their diverse learning needs, had to reshape their own behaviour in the context of the post-secondary education environment; and despite the barriers they have faced, have been able to overcome these adversities and achieve academic success. The first theme, *Unpacking the*

“Box”: Exploring perceived attitudes about diversity in the learning needs of students, focused on the participants’ perceived attitudes of others about the diverse learning needs of students. Participants described their experiences relating to reactions of acceptance and/or denial regarding their difficulties or diagnoses and indicated that these attitudes can affect their school experiences. For example, Jared expressed that there is a stigma that accompanies the diagnosis of LD and described that he felt like instructors have viewed him as being stupid. Despite those attitudes affecting Jared’s school experiences, his motivation to succeed demonstrates a protective factor related to resilience. Frida, Anna, and Jared all reported that academic accommodations were beneficial for their academic success. The use of problem-solving to access accommodations demonstrates an individual characteristic related to resilience, while the availability of such accommodations at their post-secondary institution may be considered a community variable related to protective factors for resilience. Trina’s use of skills related to mastery motivation, despite not accessing academic accommodations, also demonstrates skills gained from mastery motivation, another characteristic of resilience. She explained that her attempts to access student support services eventually got derailed due to her busy schedule. This made her decide to continue her education without their support, deciding that she has been academically successful thus far and will remain so without academic accommodations in place. Further, all participants reported that social support from friends and family was beneficial for their academic success. The family and social networks these participants access for support may also be considered protective factors for resilience. Participants shared their perceptions of how they learn best and described their experiences with learning style matches and discrepancies within the classroom environment. For example, Anna and Jared both described how the sequence in which material is taught in their classes often conflicts with the sequence in which they learn and understand material best. However, each participant reported adapting to the academic environment, demonstrating multiple characteristics related to resilience, including: intelligence, motivation to succeed, and problem-solving skills. All participants felt that there are additional supports students with and without diverse learning needs could benefit from, but may not necessarily be able to access, such as: video capture for lectures, the incorporation of various modalities in learning and demonstrating knowledge, and being asked what kinds of supports are needed instead of being provided with supports that may not fit the needs of the student. This

critical thinking demonstrates both intelligence and problem-solving skills, which are characteristic of individuals who display a resilient pattern of behaviour.

The second theme, *Breaking the “Box”: Redefining success by adapting behaviour in the context of post-secondary education*, related to participants redefining success and adapting their behaviour in the context of post-secondary education. Frida, Anna, Jared, and Trina all shared that they have used their own self-directed strategies to complement academic accommodations in order to achieve success (i.e., stay in school and successfully pass their courses). These strategies included additional academic efforts, self-reflection, and finding a school-life balance. For example, Jared explained that the extra time and effort he put into his academic work is necessary for him to achieve success in his competitive program. For Anna, Trina, and Frida, strategies have helped them to shape and redefine their conceptualizations of success within and outside of academia. For example, Trina described that throughout her educational journey, she has learned to let go of the guilt she felt by not living up to unrealistic expectations she had for herself and realized that doing her best was enough for her to consider herself academically successful. Additionally, Frida and Anna both spoke about how they work to find a school-life balance to ensure that they could achieve success; Anna may take a day off of school to rest, while Frida may sacrifice time spent on academics for extracurricular activities she finds valuable and meaningful in her life. The experiences Jared, Anna, Frida, and Trina shared regarding this theme demonstrated many characteristics associated with resilience (i.e., mastery motivation and motivation to succeed; self-regulation; intelligence; and problem-solving skills). These factors are evident through participants’ descriptions of adaptation to their environment (e.g., the development and use of self-directed strategies), as well as the use of self-reflection to re-conceptualize what success means to them.

Despite these participants’ difficulties and negative educational experiences, each of them have achieved success in post-secondary education, and therefore have demonstrated a pattern of resilience in the face of adversity. The third theme, *Reshaping the “Box”: Overcoming personal barriers and achieving success*, focused on overcoming the barriers participants faced in their post-secondary experiences and achieving success despite their difficulties. Frida, Anna, and Trina reported that their educational experiences helped to shape their feelings toward, and ability to be successful within, post-secondary education. Participants’ descriptions demonstrated multiple characteristics associated with resilience, such as: the belief that life has meaning;

motivation to succeed; a sense of community; and problem-solving skills. For example, Frida's involvement in non-academic areas of university (i.e., extra-curricular activities) helped to make her post-secondary experience more valuable to her. Anna was grateful for her negative experiences because they allowed her to self-reflect and overcome her barriers to academic success (e.g., having to work longer and harder than peers for slightly better than average grades, not being able to demonstrate her knowledge) by conceptualizing failures as learning opportunities. Trina attributed her shift to being intrinsically versus extrinsically motivated as her reason for being academically successful. Jared shared he has not changed his feelings about school as he has continued his educational pursuits, and reflected he feels his instructors/professors have lacked education and awareness his learning needs. Moreover, Frida, Anna, Jared, and Trina also made recommendations on how post-secondary institutions might better support students with diverse learning needs. For example, Frida described that the sense of belonging she felt in a smaller program with less formal teaching methods has helped her to continue her education. Jared suggested instructors/professors and support personnel (i.e., teaching or administrative assistants, etc.) need to increase their understanding and awareness of how to better meet students' diverse learning needs in the classroom environment, while Anna proposed more individualized support for students by considering how individual students conceptualize success.

5.2 Integration of Findings with Existing Literature

The findings from this study relate to literature focused on the post-secondary experiences of students with diverse learning needs, how they experience support and success within the post-secondary environment, and how they demonstrate a pattern of resilience despite the difficulties they have encountered. The three main themes identified in the accounts of the participants are discussed and connected with existing research in the areas of: (1) the school experiences of post-secondary students with diverse learning needs, (2) adapting behaviour and redefining success within the post-secondary context, and (3) achieving success and patterns of resilience in post-secondary students with diverse learning needs.

5.2.1 School Experiences of Post-Secondary Students with Diverse Learning Needs

The symptoms demonstrated by individuals with learning, attention, emotional and/or behaviour difficulties or disorders are associated with a number of difficulties within the educational context (e.g., Brown, 2013; Koury & Rapaport, 2007; Peer & Reid, 2003). Some of

these include difficulties in attention, emotional regulation, language, reading and writing, memory, coordination, and restlessness.

In the current study, Frida, Anna, Jared, and Trina revealed that the teaching methods used by their instructors do not necessarily match the way in which they learn. Anna spoke about how she learns best from working backward when learning to understand a large concept, while Jared expressed that he learns well when the foundational concepts are taught first so that they are learned before attempting to understand a larger concept. Frida explained that at that time in her program, her courses are taught more informally and that this allows her to learn from discussion and hands-on activities. Trina described a similar difficulty with writing that was required for her classes and how she preferred discussion-based learning as well. While there are some similarities between the participants' descriptions of how their learning styles are catered to within the academic environment, as individuals, they have unique needs (Belch, 2011; Trammel, 2003). This is especially evident based on Anna and Jared's descriptions of the comparison between the sequence in which they learn the best and the sequence in which material is presented in class. This finding suggests that the needs of diverse learners in post-secondary education are highly individualized. The accommodations that Anna, Frida, and Jared took advantage of and reported as beneficial to them make it clear that the institution's administration and support services division do consider the needs of diverse learners. Based on these students' perceptions however, the accommodations provided may not be individualized enough. This was made very clear by Jared's description of how he has never been asked what he needs for support, but has instead been offered generic accommodations and is expected to fit in a metaphorical "box," wherein his difficulties are assumed to fit. Anna further described her experience by explaining that she has not had the opportunity to identify, for herself, what resources of those offered to her would be beneficial and how. However, while post-secondary students with diverse needs may appreciate choosing accommodations that they feel will benefit them, evidence from Trammel's (2003) study investigating the impact of academic accommodations for post-secondary students with LD and/or ADD may suggest that having students choose their accommodations may not be beneficial for academic success. His results demonstrated that students with LD who were assigned or chose accommodations did not experience the same final grade improvement as students with ADD or LD and ADD, suggesting that difficulties associated with various disorders may lead to impairment in the decision-making

process for these students. However, Trammel (2003) did acknowledge significant limitations to his study that warrant further investigation before such claims can be made with confidence.

Closely related to the accommodations and learning styles catered to within the classroom are the perceived attitudes of others in regard to these students' diverse learning needs. Jared's analogy of the "box" reflects a general attitude about students with exceptionalities and their needs based on his experiences with support services and faculty. Trina's experience with attempting to get support and being what she described as shamed over missing an appointment is an example of such attitudes toward diverse learning needs. She explained that she may have found accommodations beneficial, but that she had been successful without them in the past and would continue her education without pursuing them. Dwyer (2000), in her study of four post-secondary students with ADD, identified more education, awareness, and understanding of ADD, for faculty and students, as an area needing improvement in post-secondary settings, while Getzel (2008) identified knowledge regarding the needs of learners as a characteristic of programs that help students with diverse learning needs continue their education. These education and awareness opportunities for faculty and students may help to prevent other students like Trina from experiencing the shame she felt as a result of missing an appointment, which is a difficulty she has as related to her diagnosis of ADD, or students similar to Jared or Anna, who have experienced negative reactions from some instructors.

Anna and Jared both spoke about some instructor's negative reactions to their diagnoses or needs. This is particularly important when considering evidence in the literature suggesting that educators have an influence on high school students' decision to drop out of school (Avrimidis & Norwich, 2002; Christle et al., 2007; Cook & Cameron, 2010; Kortering & Braziel, 1999; O'Connor et al., 2011; Riley & Docking, 2004). Results from one study of disengaged secondary students showed that only one third of students felt that most or all teachers knew and understood them, listened to their views, and treated them fairly (Riley & Docking, 2004). Although little research in this area has been conducted involving post-secondary students, Pino and Mortari's (2014) findings that faculty's awareness of and rapport with post-secondary students with dyslexia can motivate students to overcome barriers and contribute to a positive learning experience suggests that the attitudes of instructors do maintain an influence on post-secondary students' school experiences.

Beyond the boundaries of the post-secondary education environment, all participants reported social support as contributing to their academic success. Frida explained that her family and friends have supported her, even when she could not leave her house, while Anna described appreciating her fiancée's patience in the time immediately following her diagnosis. For Jared and Trina, descriptions of social support involved family or friends who had difficulties or diagnoses similar to them, but who despite their difficulties, succeeded in completing university. These results provide some support for results showing that 52% of post-secondary students reported using social support to help them cope with their ADHD-related difficulties (Kaminski et al., 2006). However, in this study it is unclear from some participants' descriptions how family and friends provide social support to these students; it may be that one student actively seeks out advice from someone in their social support network, while another student finds motivation or inspiration to academically succeed based on the school experiences of individuals in their network.

5.2.2 Adapting Behaviour and Redefining Success for Post-Secondary Students with Diverse Learning Needs

Frida, Anna, Jared, and Trina reported using additional self-directed strategies to cope with their difficulties within the academic environment. Jared and Frida explained that outside of the academic environment, they need to spend a significant amount of time and effort on homework to succeed in their classes, while Anna spends additional time seeking out alternate layouts for the material she is presented in class. Trina described that she looks for ways to apply and discuss course-related material in other aspects of her life. Frida also independently engages in self-talk as a strategy to cope with her anxiety. These results are consistent with Kaminski et al.'s (2006) study of students with ADHD-related difficulties wherein students reported using numerous additional strategies to help them cope with their difficulties, such as working harder and longer than other students; using social support; using specific study, time management, and organizational skills; exercising; spirituality or religion; maintenance of a positive attitude; and self-awareness and/or therapy. These results suggest that success for students with diverse learning needs in the post-secondary education setting is not achieved by using academic accommodations in isolation, but that students put forth significant effort to independently engage in behaviours that they perceive as facilitating academic success.

It is important to note that participants in the current study appeared to demonstrate a high level of self-awareness, as evidenced by the descriptions of their experiences and their significance in regard to their academic success. As Anna explained, “[m]ost of it was self-reflection and allowing myself enough time to sit in turmoil to kinda clear my head of judgment and all the stigma that I felt was kinda put upon me externally as well as internally.” She described how she has been able to turn her negative experiences into a positive attitude, having been able to be successful despite her difficulties. Further, Frida and Trina explained that the school-life balance they work to find, in terms of spending less time on homework and not conforming to others’ expectations, are necessary to maintain a positive attitude and behave in congruence with their values. For example, as Frida explained, “[i]t’s just the whole thing I find so overwhelming; just how important it’s made out to be and how competitive and how it’ll affect the rest of your life sort of thing. I just don’t get – I don’t buy it.” However, these participants prioritize the multiple facets of their lives in order to find a school-life balance and feel successful. While Jared explained that he perceives his maturity as contributing to prioritizing his academics over his social life, Frida, Trina, and Anna described redefining their concepts of success within the academic environment. For example, Anna revealed that she chooses to focus on her strengths when considering her own expectations of herself and how she conceptualizes success.

The self-awareness these participants demonstrate regarding what their values and priorities are demonstrates the use of self-management and self-regulation skills. Based on each participant’s perceptions of their experiences, they adapt their behaviour in keeping with their conceptualization of success. Getzel (2008) outlined that teaching self-management skills is a key characteristic of post-secondary education programs that help students with exceptionalities continue their education. While it is unclear from the current study’s results how participants developed their self-management skills, it is nonetheless evident that they have acquired and used them in the context of their post-secondary experiences, despite the time and effort they required. These results are consistent with Hadley’s (2007) study of post-secondary students with dyslexia, who reported utilizing accommodations made available to them, but were critical of the level of these accommodations, and thus felt challenged to meet academic demands. It is under these types of circumstances that students with diverse needs, despite their resources, are required to put forth more time, effort, and energy into independently supplementing the accommodations

they receive. Given their difficulties, these students may not have the time, time- and self-management skills, and energy to do so in order to remain successful in the post-secondary environment (e.g., Gillberg, 2014; Peer & Reid, 2003; Rachman, 2013; Wender, 2001).

5.2.3 Patterns of Resilience in Post-Secondary Students with Diverse Learning Needs

Despite the adversities Frida, Anna, Jared, and Trina experience as a result of their diagnoses, not only do they meet their own expectations for success, but may be considered academically successful. Each participant has chosen to continue with their education, despite their likelihood, and in two cases, past experience, of dropping out of school. Across the three themes, Anna, Frida, Jared, and Trina demonstrated numerous characteristics associated with resilience, including: problem-solving skills; intelligence; mastery motivation and motivation to succeed; and community variables such as accessing services and accommodations available through their educational institution. In relation to finding a school-life balance, Frida shared that she values her post-secondary education experience more because she has developed a sense belonging by joining extracurricular groups. She explained that though she may still feel stress regarding school, “[i]t’s not just stress because I procrastinated, it’s stress because I traded it for something that I really, really value.” She also explained that she appreciates the sense of community in her current program, with its smaller size and less formal teaching methods, adding that she may not have previously dropped out if she had experienced these earlier. Frida’s description of the sense of community she felt from participating in her program of study is also related to resilience (Masten, 2014; Masten et al., 2009). Her story includes two examples of elements that Klem and Connell (2004) argue influence high school students’ attachment to school: (1) having a sense of belonging within the school and (2) participating in extracurricular activities. Also in regard to school attachment, Frida explained that she did not like or care about school until she reached the post-secondary level. Based on Catalano et al.’s (2004) results investigating school bonding in the elementary and middle school years, regardless of Frida’s diagnosis, she had an increased risk for school dropout because she did not experience this bonding earlier in her education. She therefore demonstrates a very resilient pattern in that she has continued her education, despite her difficulties, previously dropping out, and a lack of school attachment prior to post-secondary education. These results from the current study suggest that even if school bonding does not occur in the elementary or middle school years, it may still be considered a protective factor when it occurs during post-secondary education.

Trina explained that when she came back to school after having dropped out, she had developed more coping strategies to help herself and that she was self-determined. Anna explained that she has never considered dropping out of school and that she was grateful for what her negative school experiences meant for the development of her self-directed coping strategies:

I think that I'm really grateful for how awful my university experience has been because it's really challenged me to better myself and to have not done that, I wouldn't want to imagine the turmoil in which I would be.

She further explained that she has been able to reconceptualize her failures into learning experiences and that this helps her to stay optimistic. Anna, Trina, and Frida's stories regarding their decision to come back to or stay in school are consistent with Getzel's (2008) suggestion of developing students' self-determination as a key characteristic of an education program that helps students with diverse needs continue their education. It should be noted however, that no participant attributed the development of their self-determination as coming from the post-secondary education environment. While Anna explained that her negative experiences were an important factor, she developed her self-determination because she independently engaged in self-reflection, one of her self-directed strategies. Further, while Jared explained that he's never considered dropping out of school, he added that his feelings toward school haven't changed due to his negative educational experiences. He described his understanding surrounding instructors/professors and support personnel's (i.e., teaching or administrative assistants, etc.) lack of education and awareness regarding diverse learning needs and revealed that his self-determination was driven by a desire to have the ability to perform what he considers the most interesting duties in his field. The current study's results clearly demonstrate that these students possess self-determination, but also that each of them derives their self-determination from different experiences.

Given the difficulties students with diverse learning needs may experience in the post-secondary environment, resilience may be an important lens through which to view their experiences and their decision to stay in school. Masten et al. (2009) referred to resilience as "positive adaptation in the context of significant challenges, variously referring to the capacity for, processes of, or outcomes of successful life-course development during or following exposure to potentially life-altering experiences" (p. 119). Results of the current study demonstrate that post-secondary students with learning, attention, emotional, and/or behaviour

difficulties or disorders may be viewed as showing a resilient pattern of behaviour by nature of their decision to stay in school. Frida, Anna, Jared, and Trina, despite their diagnoses and associated difficulties, may be considered as demonstrating characteristics of resilience, as their diagnoses and difficulties increase their likelihood of dropping out of school. Further, the current study takes a person-focused approach to investigating resilience, as it, “focus[es] on identifying people who meet definitional criteria for resilience, whose lives and attributes are then studied by investigators, particularly in comparison to maladaptive individuals who have similar levels of risk or adversity but who display markedly different outcomes” (Masten & Powell, 2003 p. 11). Giordano (2010) suggested that resilience must be conceptualized in relative in multi-dimensional terms. The results of the current study support this argument in that while each participant experienced positive adaptation in the context of adversity (i.e., their diagnosis and related difficulties), how positive adaptation occurred for these students varied. For example, Frida, Anna, Jared, and Trina explained that their learning styles may not often be catered to within the academic environment, forcing them to utilize self-directed strategies in order to be successful. However, those self-directed strategies and the extent to which they are perceived as beneficial varied across the participants. Further, the source of each participant’s self-determination differed, suggesting that the protective factors involved may vary across not only diagnoses, but individuals.

While it was the researcher’s intention to focus on participants’ positive school experiences in order to gain a deeper understanding of how those experiences influence students’ decision to stay in school, the majority of educational experiences participants described in relation to their difficulties were negative. However, results of the current study suggest that it is through these negative experiences that Frida, Anna, Jared, and Trina were able to develop the self-directed strategies that they consider beneficial.

5.3 Implications for Post-Secondary Professionals and Personnel

This study raises issues that may be of interest to a variety of professionals working in school-based environments (e.g., educators/instructors/professors, counsellors, academic advisors and disability service providers, teaching assistants, etc.). Results from this study provide insight into the educational experiences of four post-secondary students with learning, attention, emotional, and/or behaviour disorders. The experiences participants shared suggest a number of ideas about how post-secondary students identified with similar diagnoses can be provided with

appropriate educational experiences that facilitate students staying in school and completing their university programs. Participants provided suggestions that post-secondary institutions and professionals supporting student learning could implement to better meet the learning needs of students with learning, attention, emotional, and/or behaviour difficulties or disorders and encourage them to stay in school. For example, participants felt post-secondary institutions/professionals could: (1) provide instructors with professional development related to how to better meet students' diverse needs in the classroom environment, and (2) ask individual students what supports they feel are needed to encourage success versus prescribing generic strategies/interventions that do not suit each individual's learning needs. It is hoped educators, parents, and other professionals working in community/school environments can review participants' comments and start to gain a better understanding of the supports that have helped students with learning, attention, and/or behaviour difficulties/disorders succeed in a post-secondary academic environment by overcoming the barriers they have encountered.

Given the participants' experiences regarding attitudes about diverse learning needs, these results have implications for professional development within the post-secondary context. Based on these results, it is important to provide instructors with more high-quality professional development opportunities related to students' with diverse needs (e.g., awareness of various learning needs; focusing on student's strengths to address areas of need; designing classes to address all learning modalities).

It may be beneficial to include students' perspectives when determining needs and accommodations within the post-secondary environment. Two participants explicitly stated that they would have appreciated being able to identify the support resources available and determine how to utilize them individually. This study's results also suggest a high level of self-awareness in post-secondary students with learning, attention, emotional and/or behaviour disorders, indicating that these students may already have an understanding of what types of supports they are most likely to benefit from. Incorporating the student's perspective may encourage more success as opposed to prescribing generic strategies or interventions that do not suit individual's learning needs.

All participants in the current study explained that they learn content in different ways. For example, Jared explained that he needs to understand the foundational information before attempting to understand a more complex problem, whereas Anna described learning better by

starting with the larger and more complex problem and working backward. Further, it was suggested by two participants that more than one modality be included when teaching material. Trina suggested expanding the use of video-capturing lectures so that students can engage with the material at any time and at their own speed. Frida, Anna, and Trina also described benefiting from discussion-based learning. It is likely that all students may benefit from the inclusion of more than one modality when learning academic content.

5.4 Strengths of the Study

This study has four main strengths. First, this study provides insight and understanding into the school experiences of post-secondary students with learning, attention, emotional and/or behaviour difficulties and disorders. Participants' accounts further our understanding of how those school experiences have affected their decision to stay in school, despite the difficulties they have faced.

Secondly, this research provides post-secondary professionals (i.e., instructors/professors, administration, and support personnel such as teaching or administrative assistants, etc.) with insight into the school experiences of post-secondary students with similar difficulties or diagnoses. Participants made suggestions regarding experiences that have both helped and hindered their achievement of academic success. First, participants commented that it would be beneficial for post-secondary professionals to receive more professional development opportunities that provide education and awareness about the needs of students with diverse learning needs. These opportunities could also allow post-secondary professionals to focus on student's strengths in order to address students' areas of need and to design classes incorporating all learning modalities. Participants also suggested being asked what their support needs are as opposed to being provided with strategies that do not necessarily fit their individual needs. The incorporation of students' own knowledge and opinions about themselves may help them to achieve greater academic success in the post-secondary environment.

Next, this study employed the use of in-depth semi-structured individual interviews to collect data from participants. This particular method helped to meet the goals of the study in that the interview format allows for flexibility in the questions being asked; additional questions may be added if more detail is needed regarding a participant's experiences. This interview format may have also helped to keep data collection less formal and more comfortable for the participants, who were at times discussing sensitive information about their lives. Moreover, by

interviewing post-secondary students who were still enrolled in school at the time of data collection, bias in the memories of the participants was less likely, as opposed to incorporating only retrospective accounts from the participants.

Last and most importantly, few studies have examined the school experiences of post-secondary students with learning, attention, emotional and/or behaviour disorders and how those experiences relate to the decision to stay in school from the perspective of students themselves. By the time individuals reach the post-secondary level of education, they have a long history of educational experiences that are meaningful to them and gaining a better understanding of those experiences in relation to the decision to stay in school from the perspective of the students themselves helps to provide a richer and more detailed picture of how they experience the educational setting. Therefore, this study adds to this limited research base by providing a more comprehensive understanding of the educational experiences of students with similar difficulties or diagnoses.

5.5 Limitations of the Study

There are two main limitations related to this study. The first limitation was that a single method of data collection was used – the semi-structured individual interview. It should be noted, however, that using an observation method to collect data for this study would have been inappropriate within the post-secondary environment. However, the aim of the study was to explore students' experiences and how they related those experiences to the decision to stay in school and having students use their own voice to express their perceptions of their experiences is valuable, given that this study is situated within a constructivist paradigm.

A number of things were done to establish credibility in the study by triangulating the findings. These included: (1) the use of multiple data sources, as each participant had one initial interview and one follow-up interview; (2) the length of each interview and time between interviews, so as to relieve participants of initial anxiety and make participants more comfortable in sharing their experiences honestly; (3) comparing and cross-checking of data with relevant literature at different times; (4) peer debriefing with my thesis supervisor; and (5) member-checks with participants. Given the aim of this study, having students use their own voice to express their perceptions of their experiences is valuable, given that this study is situated within a constructivist paradigm.

A second limitation of this study relates to the case, which was defined as four post-secondary students with learning, attention, emotional and/or behaviour difficulties or disorders. Each participant in the study had a different diagnosis, with the exception of the two participants with different subtypes of ADHD, which may have affected the depth and richness of the results. For example, Jared, who is diagnosed with dyslexia, may not be representative of all post-secondary students with dyslexia. However, effort was made to provide a detailed and thick description of the context of the study in order to increase the transferability of these results.

5.6 Implications for Future Research

There are six implications for future research based on the current findings regarding the school experiences of post-secondary students and how their experiences relate to the decision to stay in school. First, based on suggestions made by participants, future research should investigate the use of an impact assessment that incorporates the student's perspective to determine what level of support is needed for a student with diverse learning needs. This impact assessment could take the form of an interview, a pencil and paper questionnaire, or both, but this researcher suggests allowing students to express in their own words what they feel they need and what may be beneficial toward their achievement of academic success. This may help to provide a more individualized support system for diverse learners in the post-secondary environment. Further, this may help to reduce the likelihood dropping out of school for students with diverse learning needs. For example, Frida alluded to how if she was able to participate in discussion-based classes earlier in her program, it may have prevented her from dropping out of school. Knowing students' individual needs as early as possible may help to facilitate more academic success for these students earlier in their post-secondary education. However, little research has been conducted examining the accuracy of students' judgments regarding their educational support needs. This will be an important factor to consider when reflecting on students' accounts and opinions in relation to their academic support decisions.

Also based on the suggestions of the participants in this study, future research should investigate the effect of increased opportunities for post-secondary professionals to engage in professional development. Knowledge about how this information, and *what* information, is received and applied within the post-secondary context will have implications for program and course designs, support services, and the academic success of students with diverse learning needs.

Moreover, future research should explore the use of a measure for students' satisfaction in the services and supports they receive as a result of their difficulties or diagnosis in the post-secondary context. Results from such studies may provide institutions with guidance on how to provide supports that are beneficial and meaningful to their students.

More insight into how social support is experienced by post-secondary students with diverse learning needs may contribute to a deeper understanding of students' perceptions of it being beneficial to their academic success. All participants in this study reported social support as contributing to their academic success. These results provide some support for results showing that a significant portion of post-secondary students reported using social support to help them cope with their ADHD-related difficulties (Kaminski et al., 2006). However, based on results of the current study, it is unclear from some participants' descriptions how family and friends provide social support to these students; it may be that one student actively seeks out advice from someone in their social support network, while another student finds motivation or inspiration to academically succeed based on the school experiences of individuals in their network.

In this study, three participants spoke about their instructor's reactions to their needs and/or diagnosis. While research has explored the relationship between staying in school and rapport with instructors in high school, there is limited research on this topic that includes students at the post-secondary level (Pino & Mortari, 2014). When considering findings suggesting that instructor's rapport with post-secondary students with dyslexia influences these students' motivation to overcome barriers (Pino & Mortari, 2014), in combination with our existing knowledge on the influence of educators, further investigation is warranted within the post-secondary environment.

Lastly and in relation to a limitation noted earlier, future investigations of the school experiences of post-secondary students with diverse learning needs may focus on groups of students that have a diagnosis from the same diagnostic category. While it may be rare to encounter a pure diagnosis of learning, attention, emotional, and/or behaviour disorders, researchers may include groups of students whose primary diagnosis fits into the same diagnostic category. This may help to further our understanding of the school experiences of post-secondary students with a specific diagnosis by providing deeper and richer detail about their lives. While the results of this study indicated that some students may benefit from similar supports or accommodations, it may be that students with diagnoses from different diagnostic categories

require diverse supports. Further, future researchers may wish to include samples that distinguish between students who have returned to school having previously dropped out and those who have never dropped out of school. Distinguishing between these groups of students may provide a more detailed and rich description of the various educational circumstances under which students make the decision to stay in school.

5.7 Conclusion

In conclusion, the findings from this study demonstrated that it is important for post-secondary professionals to have an understanding of the diverse learning needs of students in order for these students to be academically successful. Further, these professionals must be aware that students with diverse learning needs may not benefit from the academic accommodations provided to them and instead must develop their own strategies to help them succeed in the educational environment. Findings from this study suggest that students' perspectives should be included in decisions regarding types of supports and accommodations implemented in order to facilitate support that is more individualized and therefore, likely to be beneficial. Moreover, the results of this study demonstrated that despite the difficulties experienced by post-secondary students with learning, attention, emotional, and/or behaviour difficulties, they remain active participants in their own academic success, demonstrating a pattern of resilience. Finally, findings from this study indicated that this resilience is manifested through students' self-determination as a result of the self-directed strategies these students develop and use.

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APPENDIX A

STUDENT RECRUITMENT ONLINE ADVERTISEMENT



Staying in School: Exploring the Experiences of Post-Secondary Students with Diverse Needs

Are you a post-secondary student with learning, attention, and/or behaviour difficulties or disorders?

Would you be willing to discuss your experiences in confidential research interviews?

I, Lauren Brandt, am a graduate student researcher in Educational Psychology and Special Education at the University of Saskatchewan. I am interested in the school experiences of students with learning, attention, emotional and/or behaviour difficulties (e.g., reading, writing, learning difficulties/disabilities, attention and/or impulsivity difficulties/Attention-Deficit Hyperactivity Disorder, etc.). I am seeking volunteers to participate in one individual 60-90 minute interview, and one follow-up meeting for my research study. You will be given a small token of appreciation after you have completed your participation in the study.

In order to participate, the volunteer must:

- A) Be 18 years of age or older.
- B) Have been identified as showing learning, attention, emotional, and/or behavioural difficulties.
- C) Be willing to share his/her story of being identified/diagnosed and what his/her school experiences have been.

If you are interested in learning more about this study, please contact Lauren Brandt at (###) ###-#### and leave a message or email: lrm191@mail.usask.ca.

This research study has been approved by the Behavioural Research Ethics Board at the University of Saskatchewan (BEH13-108).

APPENDIX B

STUDENT INTERVIEW GUIDE

Questions for First Interview

1. How old are you?
2. What program are you in?
3. What year of your program are you in? Is this your first degree?
4. What is the diagnosis or difficulty that you have been identified as having? When did you receive that information?
5. Can you describe what it was like to be told you had ____ difficulty or a diagnosis of ____?
6. How do you feel this has affected your life at school? Can you give me any examples?
7. Can you describe the atmosphere in your program/classes?

Categories for sub-questions:

How instructors/professors respond to your needs? Adaptations needed that are made/not made? How other students respond/react to your needs? Competitiveness of program/fellow students?

8. Can you describe for me any aspects of your program or the university that help you to succeed academically?

Categories for sub-questions:

University services (mental health, medical, students' union, social support groups) accessed? Academic tutoring or groups? College groups/societies? Mandatory components of classes or demands of program/classes (e.g., attendance, practicums, group vs. individual assignments, types frequency of assignments/examinations, learning styles incorporated into assignments/examinations etc.)?

9. Aside from anything school-related, can you describe any other aspects of your life that have helped you to succeed in university?

Categories for sub-questions:

Peer/family support? Community services/support groups accessed?

Accommodations/living conditions (student residences or off-campus residence)?

10. Can you describe for me any aspects of your program of the university that make/made it difficult for you to succeed academically?

Categories for sub-questions:

Mandatory components of classes or demands of program/classes (e.g., attendance, practicums, group vs. individual assignments, types frequency of assignments/examinations, learning styles incorporated into assignments/examinations etc.)?

11. Aside from anything school-related, are there other aspects of your life that make/made it difficult for you to succeed in university?

Categories for sub-questions:

Access to community services/support groups? Peer/family support? Other commitments (children/family obligations, social life, job/career obligations)?

12. Has there ever been a time where you considered dropping out of school?

13. What things did you consider in making the decision to stay in school/come back to school? (school-related and non-school-related)

14. Have your feelings about school changed since making that decision? Can you describe how your feelings have changed? Why do you think your feelings have changed?

15. Do you have any plans for when you graduate? Can you tell me about them?

16. Is there anything else you would like to tell me about your feelings toward school in relation to aspects that help you to succeed academically?

Additional Topics for Discussion

The roles of academic performance, relationships with peers, instructors/professors, and staff, extracurricular activities

APPENDIX C
PARTICIPANT CONSENT FORM



Participant Consent Form

You are invited to take part in a research study called "*Staying in School: Exploring Experiences of Post-Secondary Students with Diverse Needs*". Please read this form carefully and feel free to ask any questions you have about the procedures or goals of the study and your role.

Researcher: Lauren Brandt, Graduate Student, Department of Educational Psychology and Special Education, University of Saskatchewan (email: lauren.brandt@usask.ca, phone: (###) ###-####)

Supervisor: Dr. Laureen McIntyre, Department of Educational Psychology and Special Education, University of Saskatchewan (email: laureen.mcintyre@usask.ca)

Purpose and Procedure: You are being asked to take part in one interview and one follow up meeting. This will give an understanding of how being identified as showing learning, attention, emotional, and/or behavioural difficulties has affected your school experiences and how those experiences relate to your decision to stay in school.

I want you to talk freely about your experiences. The first interview will be between 60-90 minutes. I will ask you if it is okay to audio record this interview. You can ask to have the recording turned off at any time. Later this interview will be written out word for word. Then you will be given a copy of the interview to read at the follow-up meeting.

The follow-up meeting will last around 45-60 minutes. The information from the audio recordings will only be heard by me and my supervisor. Your name and identity will be kept private by using a different name. You are encouraged to answer only those questions which you are comfortable with.

All interviews will be at a time and place that works for you. You may decide not to participate at any time.

The findings will be used for my thesis. I might use these findings to write an article or talk about them at large meetings.

Potential Risks: Any risk for being involved in this study is low. Taking part in this study is your choice. You have the right to leave at any time.

It is possible that you may have some discomfort in talking about your experiences. At all times you are free to decide what you want to discuss. You can end a discussion or choose not to

answer any question. If you experience any bad feelings because of the study, here is a list of places you can visit/phone:

Disability Services for Students

University of Saskatchewan

E1 Administration Bldg
105 Administration Pl.
Saskatoon SK S7N 5A2
Phone: (306) 966-7273

Student Counselling Services

University of Saskatchewan

3rd Floor, Place Riel
1 Campus Drive
Saskatoon SK S7N 5A3
Phone: (306) 966-4920

Mental Health Services - Saskatoon Health Region

Youth Community Counselling Program

715 Queen Street
Saskatoon, SK S7K4X4
Phone: (306) 655-7802

Family Service Saskatoon

102, 506 - 25th Street East
Saskatoon, SK S7K 4A7
Phone: (306) 244-0127

Catholic Family Services of Saskatoon

200-506 25th Street East
Saskatoon, SK S7K 4A7
Phone: (306) 244-7773
Fax: (306) 244-8537
Email: staff@cfsaskatoon.sk.ca

Prairie Therapists and Trainers

910 Queen Street
Saskatoon, SK S7N 0N2
Phone: (306) 665-6242
Toll-Free: 1-877-772-9933
Fax: (306) 6642410

Potential Benefits: Talking about your experiences of being identified as showing learning, attention, emotional, and/or behavioural difficulties and your experiences in school may be helpful to you. Taking part in this study may also help us to better understand others who are also

identified as showing learning, attention, emotional, and/or behavioural difficulties. This may also help instructors understand students with difficulties in order to teach students better.

Confidentiality: The information from this study will be shared with the public, but your name will be kept private through the use of a different name. This form will be kept separate from the information you give in the interview and follow-up meeting and it will not be possible to connect your name with the information you give. The interview recordings will also be known by a different name.

Storage of Data: To protect your privacy, all of the information from the study will be kept in a locked filing cabinet. After the study has ended, the information will be kept for five years in a locked filing cabinet in Dr. Laureen McIntyre's office. After five years, the data will not be needed and it will be destroyed.

Right to Withdraw: Your participation is voluntary and you can answer only those questions that you are comfortable with. You may withdraw from the research project for any reason, at any time without explanation or punishment of any kind. If you decide to leave the study, this will not affect your access to services or your position within your school. If you leave the study, any information that you have given will be destroyed. Your right to remove your information will apply until you have reviewed the transcripts from the interviews. After this time it may not be possible to remove your information from the study.

Follow up: To obtain results from the study, please contact the researcher at the number provided. The complete study can be found by calling myself at (###) ###-#### or by e-mail at lauren.brandt@usask.ca or by calling my thesis supervisor Dr. Laureen McIntyre at (306) 966-5266.

Questions or Concerns: If you have any questions or concerns about the study, please feel free to ask at any time. You are also free to call the researcher at the number provided below if you have questions later.

This research project has been approved on ethical grounds by the University of Saskatchewan Research Ethics Board (BEH13-108). Any questions regarding your rights as a participant may be addressed to that committee through the Research Ethics Office at ethics.office@usask.ca or (306) 966-2975. Out of town participants may call toll free (888) 966-2975.

Consent to Participate: I have read and understand the information above. I have been able to ask questions and my questions have been answered. I agree to participate in the study described above, understanding that I may choose to leave this study at any time. A copy of this Consent Form has been given to me to keep.

_____ <i>Name of Participant</i>	_____ <i>Signature</i>	_____ <i>Date</i>
_____ <i>Researcher's Signature</i>	_____ <i>Date</i>	

APPENDIX D
DATA/TRANSCRIPT RELEASE FORM



**UNIVERSITY OF
SASKATCHEWAN**

DATA/TRANSCRIPT RELEASE FORM

I, _____, have reviewed the complete transcript of my personal interview in this study, and have been provided with the opportunity to add, alter, and delete information from the transcript as appropriate. I acknowledge that the transcript accurately reflects what I said in my personal interview with Lauren Brandt. I hereby authorize the release of this transcript to Lauren Brandt to be used in the manner described in the Consent Form. I have received a copy of this Data/Transcript Release Form for my own records.

Name of Participant

Date

Signature of Participant

Signature of Researcher